

Appeal Nos. 2013-1504, -1505

United States Court of Appeals  
for the  
Federal Circuit

DDR HOLDINGS, LLC,

*Plaintiff-Appellee,*

— V. —

HOTELS.COM, L.P., CENDANT TRAVEL DISTRIBUTION SERVICES GROUP, INC., EXPEDIA, INC., TRAVELOCITY.COM, L.P., SITE59.COM, LLC, INTERNATIONAL CRUISE & EXCURSION GALLERY, INC., OURVACATIONSTORE, INC., INTERNETWORK PUBLISHING CORPORATION and ORBITZ WORLDWIDE, LLC,

*Defendants,*

– and –

NATIONAL LEISURE GROUP, INC. 2013-1504, -1505  
and WORLD TRAVEL HOLDINGS, INC.,

*Defendants-Appellants,*

– and –

DIGITAL RIVER, INC.,

*Defendant-Appellant.*

APPEAL FROM THE UNITED STATES DISTRICT COURT FOR  
THE EASTERN DISTRICT OF TEXAS IN CASE NO. 06-CV-00042,  
JUDGE J. RODNEY GILSTRAP

**BRIEF FOR DEFENDANTS-APPELLANTS  
NATIONAL LEISURE GROUP, INC.  
AND WORLD TRAVEL HOLDINGS, INC.  
(CORRECTED)**

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### **CERTIFICATE OF INTEREST**

Counsel for Appellants National Leisure Group, Inc. and World Travel Holdings, Inc. (collectively “NLG/WTH”), certify the following:

1. The full name of every party represented by counsel of record is:

a. National Leisure Group, Inc.

b. World Travel Holdings, Inc.

2. The name of the real party in interest represented by counsel of record is:

None.

3. All parent corporations and any publicly held companies that own 10 percent or more of the stock of the party represented by counsel of record:

None.

4. The names of all law firms and the partners or associates that appeared for the parties now represented by counsel of record in the agency or are expected to appear in this Court are:

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## TABLE OF CONTENTS

I.	STATEMENT OF RELATED CASES.....	1
II.	STATEMENT OF JURISDICTION .....	1
III.	STATEMENT OF THE ISSUES .....	2
IV.	STATEMENT OF THE CASE .....	3
V.	STATEMENT OF FACTS .....	3
A.	NLG/WTH’s Business and History .....	3
B.	Procedural History .....	4
C.	The Patents-In-Suit.....	6
D.	Claim Construction Relating To The Asserted Claims .....	8
E.	NLG/WTH’s Websites Accused In DDR’s Expert Report .....	9
F.	The District Court’s Rulings On Motions <i>In Limine</i> .....	10
G.	The Trial and Verdict .....	11
H.	Post-Trial Motions .....	12
VI.	SUMMARY OF THE ARGUMENT .....	14
VII.	ARGUMENT .....	15
A.	Standard of Review .....	15
B.	The District Court Erred In Failing To Invalidate The Asserted Claims Under 35 U.S.C. §101 As They Impermissibly Cover The Abstract Idea Of Having Two Web Pages Look The Same Through Branding And Lack Any Meaningful Limitations .....	16



1)	<i>The Asserted Claims Relate To The Abstract Idea Of Having Two Web Pages Look The Same, And Not To “Application” Of The Abstract Idea, As Confirmed By DDR’s Testimony.....</i>	19
2)	<i>The Asserted Claims Are Not “Meaningfully Limited” Because They Cover All Possible Ways To Make Two Web Pages Look The Same Through Branding And Do Not Tie The Abstract Idea To “A Specific Way Of” Or “Specific Computer For” Making Web Pages Look The Same.....</i>	23
C.	<i>The District Court Erred In Concluding That The Asserted Claims Were Not Indefinite Under 35 U.S.C. §112 As The Terms “Look And Feel Description” and “Visually Perceptible Elements” Clearly Call For A Subjective Determination.....</i>	30
1)	<i>The Testimony of DDR’s Trial Witnesses And Its Inconsistent Infringement Contentions Confirms That The Asserted Claims Are Indefinite .....</i>	32
2)	<i>The Specification Confirms the Indefiniteness of “Look and Feel Description Associated with a Host Website” (or “a First Website”) and “Visually Perceptible Elements Corresponding To The Source Page” .....</i>	38
D.	<i>The District Court Abused Its Discretion By Allowing DDR’s Infringement Expert To Testify About Conclusory Opinions, Theories That Were Disclosed Late, And NLG/WTH Websites That Were Not Accused In Its Infringement Contentions .....</i>	42
1)	<i>Keller’s Conclusory And Late Disclosed Opinions Should Have Been Precluded .....</i>	42
2)	<i>It Was Unfair And Prejudicial To Allow DDR to Introduce Evidence Of Websites That Were Not Identified In Its Infringement Contentions, While At The Same Time Preclude NLG/WTH From Introducing Evidence Of “State Of The Art” Because Such Evidence Was Not Identified In Its Invalidity Contentions .....</i>	43

E.	The District Court Erred In Not Setting Aside The Infringement Verdict Because It Was Not Supported By “Substantial Evidence” .....	45
1)	<i>DDR Failed To Introduce Substantial Evidence That The Accused Websites Convey The Same “Overall Appearance” .....</i>	46
2)	<i>The Accused Websites Cannot Satisfy The Element That The “Computer Processor Is In Communication With The Host Website” As Required By Claim 13 of the ‘572 Patent .....</i>	50
3)	<i>The Court Should Reverse The Infringement Judgment Because DDR Conceded That There Was No Direct Infringement Of Claim 17 Of The ‘572 Patent By NLG/WTH And There Is No Evidence That NLG/WTH Directed And Controlled Other Parties To Infringe.....</i>	52
4)	<i>There Is No Evidence That The NLG/WTH Computer Processor Automatically Recognizes Or Identifies The Source Page As Required By Claims 1 and 19 Of The ‘399 Patent .....</i>	54
5)	<i>DDR Failed To Prove That NLG/WTH Infringed The Asserted Claims Om More Than One Day, And Infringement Could Not Occur Before The ‘399 Patent Issued .....</i>	56
F.	The Jury’s Damages Verdict Was Not Supported By Substantial Evidence And Should Have Been Set Aside.....	58
1)	<i>DDR Failed To Tie Its Claim For Damages To The Relevant Infringement By Each Accused Website.....</i>	59
2)	<i>There Was No Basis for The 5.5% Royalty Rate And It Should Not Have Been Applied To The Entire Market Value of NLG/WTH’s Revenue.....</i>	62

3) <i>The District Court Abused Its Discretion In Awarding Pre-Judgment Interest From 2006.....</i>	64
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VIII. CONCLUSION.....	65
-----------------------	----

## TABLE OF AUTHORITIES

### Cases

<i>Accenture Global Services, Gmbh v. Guidewire Software, Inc.</i> , -- F.3d --, 2013 WL 4749919 (Fed.Cir. Sept. 5, 2013).....	17, 18, 25, 27
<i>Akamai Techs Co. v. Limelight Networks, Inc.</i> , 692 F.3d 1301 (Fed.Cir. 2012).....	52
<i>Amazon.com, Inc. v. Barnesandnoble, Inc.</i> , 239 F.3d 1343 (Fed.Cir. 2001) .....	48
<i>Applied Medical Resources Corp. v. U.S. Surgical Corp.</i> , 435 F.3d 1356 (Fed.Cir. 2006).....	59
<i>Aristocrat Technologies Australia Pty Ltd. v. International Game Technology</i> , 709 F.3d 1348 (Fed.Cir. 2013).....	53
<i>Bancorp, Services v. Sun Life Assur. Co. of Canada</i> , 687 F.3d 1269 (Fed. Cir. 2012).....	18, 25, 27
<i>Bilski v. Kappos</i> , 130 S.Ct. 3218 (2010).....	17, 25
<i>In re Bilski</i> , 545 F.3d 943 (Fed.Cir. 2008).....	15, 25
<i>Bocanegra v. Vicmar Services, Inc.</i> , 320 F.3d 581 (5 <sup>th</sup> Cir. 2003).....	16
<i>In re Brooks</i> , 90 F.2d 106 (C.C.P.A. 1937) .....	20
<i>Cordis Corp. v. Boston Scientific Scimed, Inc.</i> , 658 F.3d 1347 (Fed.Cir. 2011).....	47
<i>Crystal Semiconductor Corp. v. TriTech Microelectronics Intern., Inc.</i> , 246 F.3d 1336 (Fed.Cir. 2002).....	64

<i>CyberSource Corp. v. Retail Decisions Inc.</i> , 654 F.3d 1366 (Fed.Cir. 2011).....	27
<i>Datamize, LLC v. Plumtree Software, Inc.</i> , 417 F.3d 1342 (Fed.Cir. 2005).....	30, 31, 39
<i>Dealertrack, Inc. v. Huber</i> , 674 F.3d 1315, 1333 (Fed.Cir. 2012) .....	27
<i>Ellis v. Liberty Life Assurance Co. of Boston</i> , 394 F.3d 262 (5 <sup>th</sup> Cir. 2004).....	16
<i>Epcon Gas Sys., Inc. v. Bauer Compressors, Inc.</i> , 279 F.3d 1022 (Fed.Cir. 2002).....	51
<i>General Electric Co. v. Wabash Appliance Corp.</i> , 304 U.S. 364 (1938).....	30
<i>Gottschalk v. Benson</i> , 409 U.S. 63 (1972).....	27
<i>Halliburton Energy Services, Inc. v. M-I LLC</i> , 514 F.3d 1244 (Fed.Cir. 2008).....	31
<i>Honeywell Int’l, Inc. v. International Trade Comm.</i> , 341 F.3d 1332 (Fed.Cir. 2003).....	30
<i>i4i Ltd. Partnership v. Microsoft Corp.</i> , 598 F.3d 831 (Fed.Cir. 2010).....	15
<i>Innogenetics, N.V. v. Abbott Labs.</i> , 512 F.3d 1363 (Fed.Cir. 2008) .....	43
<i>Laserdynamics v. Quanta Computer, Inc.</i> , 694 F.3d 51 (Fed.Cir. 2012); .....	62
<i>Lemelson v. United States</i> , 752 F.2d 1538 (Fed.Cir.1985).....	45

<i>Lucent Tech., Inc. v. Gateway, Inc.</i> , 580 F.3d 1301 (Fed.Cir. 2009).....	59
<i>McFadden v. Prudential Ins. Co. of Am.</i> , No. 12-60569, 2013 WL 1297642 (5 <sup>th</sup> Cir. April 2, 2013).....	16
<i>Mirror Worlds, LLC v. Apple, Inc.</i> , 692 F.3d 1351 (Fed.Cir. 2012).....	16, 58
<i>Mirror Worlds, LLC v. Apple, Inc.</i> , 784 F.Supp.2d 703 (E.D.Tex. 2011), <i>aff'd</i> , 692 F.3d 1351 (Fed.Cir. 2012) .....	62
<i>Muniauction, Inc. v. Thomson Corp.</i> , 532 F.3d 1318 (Fed.Cir. 2008).....	26, 52
<i>Nike, Inc. v. Adidas Am. Inc.</i> , 479 F.Supp.2d 664 (E.D.Tex. 2007).....	43
<i>O'Reilly v. Morse</i> , 56 U.S. 62 (1853).....	23
<i>O2 Micro Int'l Ltd. v. Monolithic Power Sys., Inc.</i> , 467 F.3d 1355 (Fed.Cir. 2006).....	44
<i>OddzOn Prods., Inc. v. Just Toys, Inc.</i> , 122 F.3d 1396 (Fed.Cir. 1997).....	35
<i>Orion IP, LLC v. Hyundai Motor Am.</i> , 605 F.3d 967 (Fed.Cir. 2010).....	16
<i>Parker v. Flook</i> , 437 U.S. 584 (1978).....	27
<i>Process Control Corp. v. HydReclaim Corp.</i> , 190 F.3d 1350 (Fed.Cir. 1999).....	51
<i>Soverain Software LLC v. Newegg Inc.</i> , 705 F. 3d 1333, 1344 (Fed.Cir. 2013) .....	26

<i>Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc.</i> , 723 F.3d 1363 (Fed.Cir. 2013).....	15
<i>Ultramercial, Inc. v. Hulu, LLC</i> , 722 F.3d 1335 (Fed.Cir. 2013).....	16, 17, 18, 21, 23, 24, 25, 28, 29
<i>Uniloc USA, Inc. v. Microsoft Corp.</i> , 632 F.3d 1292 (Fed.Cir. 2011).....	62
<i>Uniroyal, Inc. v. Rudkin-Wiley Corp.</i> , 939 F.2d 1540 (Fed.Cir. 1991).....	64
<i>White v. Dunbar</i> , 119 U.S. 47 (1886). ....	48
<i>Whitserve, LLC v. Computer Packages, Inc.</i> , 694 F.3d 10 (Fed.Cir. 2012).....	62

## **Statutes**

28 U.S.C. §1295(a)(1).....	1
28 U.S.C. §1331 .....	1
28 U.S.C. §1338.....	1
35 U.S.C. §101 .....	2, 12, 14, 16, 18, 25, 28, 29
35 U.S.C. §112.....	2, 13, 14, 15, 30, 31, 32, 41
35 U.S.C. §271.....	14
35 U.S.C. §1 .....	1







### **III. STATEMENT OF THE ISSUES**

- 1) Whether the District Court erred by failing to hold the Asserted Claims invalid under 35 U.S.C. §101 because the claims lack substantive limitations to avoid covering the abstract idea of having two web pages look the same though branding.
- 2) Whether the District Court erred by failing to hold the Asserted Claims indefinite under 35 U.S.C. §112.
- 3) Whether the District Court abused its discretion by allowing DDR's infringement expert to testify about conclusory opinions, theories that were disclosed late, and NLG/WTH websites that were not accused in DDR's infringement contentions.
- 4) Whether the District Court erred in declining to set aside the infringement verdict because of a lack of substantial evidence that NLG/WTH's accused websites infringed any of the Asserted Claims.
- 5) Whether the District Court erred in declining to set aside the damages award because it is unsupported by substantial evidence and was not tied to the infringement claim.
- 6) Whether the District Court abused its discretion in awarding prejudgment interest when the case was stayed at the request of DDR, over NLG/WTH's objection, and DDR is a non-practicing entity.

#### **IV. STATEMENT OF THE CASE**

DDR sued NLG/WTH for infringement of three patents-in-suit, one of which was withdrawn, based on its operation of nine different websites. In October 2012, a jury found that NLG/WTH infringed two patents-in-suit and awarded damages of \$750,000. The District Court denied NLG/WTH's renewed JMOL motions. The District Court's final judgment ordered NLG/WTH to pay \$1,031,404.00, including prejudgment interest (costs have not yet been determined).

#### **V. STATEMENT OF FACTS**

##### **A. NLG/WTH's Business and History**

NLG/WTH is a travel agency that principally sells cruises under both its own brands, such as "CruisesOnly" and "Vacation Outlet," and under private label partnership brands, such as Priceline and BJ's Wholesale Club, via the Internet, telephone, direct marketing and retail. ([www.worldtravelholdings.com](http://www.worldtravelholdings.com)). For its partnerships, NLG/WTH partners with major brands and cruise lines (for example, Carnival Cruises, Norwegian Cruise Line) to sell cruises online or through call centers. *Id.* For example, when customers are ready to book a cruise, they can book it directly online, through the website operated by NLG/WTH for its partner, or by calling a toll-free phone number and being assisted by a cruise coordinator.

*Id.* About 75% of NLG/WTH's revenues occur by telephone transactions. (A08070-A08071).

By 1995, NLG sold vacations at, for example, BJ's Wholesale Club "through point of purchase displays in the 45 BJ's Clubs along the Eastern Seaboard as well as quarterly advertisements in BJ's Journal." (A08705). When the Internet gained popularity, in January 1998, NLG offered its vacations and cruises through websites for different partners that were branded with both NLG's "Vacation Outlet" or "Cruise Outlet" brands, and partner brands. (A07177, A08712).

NLG was acquired by WTH in 2006 and legally dissolved in 2010. (A03861:5-23, A04600:22-A04601:2).

## **B. Procedural History**

DDR Holdings, LLC ("DDR") is a non-practicing entity. (A03766:21-24). DDR first brought this lawsuit in 2006 against NLG and others, asserting infringement of U.S. Patents Nos. 6,629,135 ("the '135 Patent") and 6,993,572 ("the '572 Patent") (A00255). The lawsuit was filed on the same day the '572 Patent issued. (A00122, A00255).

In its July 2006 Partial Amended Disclosure Pursuant to Eastern District of Texas Local Patent Rules 3-1, 3-2 and Fed.R.Civ.P. 26(a)(1) ("2006 Infringement

Contentions”), DDR asserted that NLG’s website, “pricelinecruiseoutlet.com”, infringed the claims of the ‘135 and ‘572 Patents. (A01150-A01151).

In September 2006, DDR filed requests for *ex parte* reexaminations in the Patent Office for both the ‘135 and the ‘572 Patents on the basis of some of the prior art disclosed by NLG and others. (A00217:Dkt.146). DDR filed a contested motion for a stay of the litigation. *Id.* On December 19, 2006, the District Court granted DDR’s motion to stay and determined “[t]hat alleged damages incurred by Plaintiff are not tolled during the pendency of the reexamination up until the initial ruling by the PTO.” (A00413). The USPTO ordered reexamination of the ‘135 and ‘572 Patents in February 2007 and rejected the claims of the ‘135 Patent and all but two of the claims of the ‘572 Patent. (A00451, A00463). DDR appealed the Examiner’s rejection to the Board of Patent Appeals. *Ex Parte DDR Holdings, LLC*, Appeal No. 2009-013988 (BPAI April 16, 2010). On April 16, 2010, the Board reversed the rejections. *Id.* Reexamination Certificates were issued for the ‘135 Patent and ‘572 Patent with no change in the claims. (A00665, A00710). The stay was lifted on October 4, 2010, after a four year delay in the litigation. (A00469).

During the stay, DDR pursued a third patent. (A00163). On December 8, 2010, DDR filed a Third Amended Complaint which added infringement claims based on U.S. Patent No. 7,818,399 (“the ‘399 Patent”). (A00470).

In DDR's April 2011 Disclosure Pursuant to Local Patent Rules 3-1, 3-2 and Fed.R.Civ.P. 26(a)(1) ("2011 Infringement Contentions"), DDR defined the "Accused Instrumentality" as NLG's "Cruise Only affiliate program" and gave examples of three private label affiliate websites, namely, [www.cruises.united.com](http://www.cruises.united.com) ("United"), [www.usairwayscruises.com](http://www.usairwayscruises.com) ("US Airways"), and [www.cruises.priceline.com](http://www.cruises.priceline.com) ("Priceline"), which are different from NLG's "Cruises Only" program. (A08805, A08807-A08808).

On September 9, 2011, DDR filed a Fourth Amended Complaint adding WTH as a party to the litigation. (A00551, A00558). On January 23, 2012, DDR updated its Infringement Contentions, again specifying the "Accused Instrumentalities" identified in the 2011 Infringement Contentions, namely, United, US Airways and Priceline. (A08759-A08761).

### **C. The Patents-In-Suit**

The '399 Patent is a continuation of the '572 Patent which in turn is a continuation of the '135 Patent. (A00163). All three patents share a common written description that describes e-commerce outsourcing systems and methods relating to the outsourced e-commerce support pages having a common look and feel with a host's website. (A00108-A00109, A00148-A00149, A00192-A00193). Of particular importance, the common specification describes only an "automatic" process for the capture of a host's "look and feel." (A00154, 14:6-21; A00198,

13:3-21). Specifically, the specification describes “a typical system for accomplishing” the capture as including “a data store for storing look and feel descriptions, a communication channel to the host whose look and feel is to be captured and a processor for executing the capture.” (A00154, 14:14-16; A00198, 13:13-15).

Shortly before trial, DDR dropped its infringement allegations for the ‘135 Patent and asserted only the ‘572 and ‘399 Patents against NLG/WTH. (A02993). DDR admitted that the ‘135 Patent described an “automatic” capture process, which NLG/WTH did not practice. DDR asserted the following claims: Claims 13, 17, and 20 of the ‘572 Patent and Claims 1, 3 and 19 of the ‘399 Patent (“Asserted Claims”). (A02993). Claims 13 and 17 of the ‘572 Patent and Claims 1 and 19 of the ‘399 Patent are independent claims. (A00204-A00205). Claim 13 of the ‘572 Patent and Claim 19 of the ‘399 Patent are system claims; Claims 17 and 20 of the ‘572 Patent and Claims 1 and 3 of the ‘399 Patent are process claims. (A00162, A00204-A00205). The Asserted Claims are in the Addendum.

### D. Claim Construction Relating To The Asserted Claims

On September 9, 2011, the parties' "Joint Claim Construction and Prehearing Statements" stated an agreed constructions for several terms, including:

Term	Agreed-upon constructions
Look and feel <sup>1</sup>	A set of elements related to visual appearance and user interface conveying an overall appearance identifying a <a href="#">website</a> ; such elements include logos, colors, page layout, navigation systems, frames, "mouse-over" effects, or others elements consistent through some or all of the <a href="#">website</a> .
Visually perceptible elements <sup>2</sup>	<a href="#">look and feel</a> elements that can be seen.
Web page	a document that is accessible through the World Wide Web and capable of being displayed by a web browser.
First web page	<a href="#">Host web page</a> .

Term	Agreed-upon constructions
Website	One or more related <a href="#">web pages</a> at a location on the World Wide Web.
First web site	<a href="#">Host website</a> .
Commerce object	a <a href="#">third-party merchant's</a> : catalog, category, product (goods or services), or dynamic selection.
Merchant	producer, distributor, or reseller of goods or services to be sold.
Host/owner	an operator of a <a href="#">website</a> that engages in Internet commerce by incorporating one or more <a href="#">links</a> to an e-commerce <a href="#">outsource provider</a> into its web content.

(A00542-A00543). Although the parties agreed upon a construction for the terms "look and feel" and "visually perceptible elements," NLG/WTH reserved its right to argue that these terms were indefinite and offered definitions in the alternative. (A00542).

On November 21, 2011, the District Court's Claim Construction Order construed, *inter alia*, the term "link" as "a hypertext, text, banner, logo, graphic, or other element that permits a user to navigate from one web location to another web



location by activating that element,” and the term “look and feel description” as “data defining the look and feel.” (A01069, A01075).

#### **E. NLG/WTH’s Websites Accused In DDR’s Expert Report**

Despite DDR’s 2011 and 2012 Infringement Contentions regarding three websites (United, US Airways and Priceline), DDR’s infringement expert’s, Arthur Keller, report of May 18, 2012, ignored the United and US Airways websites and only analyzing “whether NLG/WTH’s top clients infringe” the Asserted Claims, namely, Priceline, Orbitz and BJ’s. (A07604, A07612). Rather than submit detailed claim charts, Keller gave conclusory opinions that these three websites infringe the Asserted Claims. (A07617-A07623). In addition, Keller identified six other NLG/WTH websites, namely, Cheaptickets, American Airlines, Alaska Airlines, Bookit, Hotwire and Travelnow, as infringing the Asserted Claims. (A07612). However, Keller provided only cursory summaries of the allegedly similar “look and feel” elements for these six additional websites and did not disclose any files that allegedly contained the “look and feel description” or “visually perceptible elements” as required by the Asserted Claims. *Id.* NLG/WTH filed a motion to strike the conclusory report. (A00240:Dkt.428). The Court denied that motion on the eve of trial, on October 2, 2012. (A02851, 143:9-24).

DDR's supplemental Keller expert report of August 27, 2012, attempted to cure the inadequacies the initial report. NLG/WITH filed a motion to strike this late-filed report. (A00240:Dkt.431). NLG/WITH opposed the supplement as identifying source code, which DDR knew about over one year prior to supplementation and could have included in the initial report. (A00051-A00055). On September 24, 2013, the Court denied NLG's objections to the belated identification of source code. (A00048-A00049, A00051-A00055).

## F. The District Court's Rulings On Motions *In Limine*

In addition to joining in motions *in limine* filed by other defendants, NLG/WTH separately filed two motions *in limine* that are relevant to this appeal. First, NLG/WTH requested an Order precluding DDR from presenting any argument, testimony or evidence related to alleged infringement not previously disclosed in DDR's infringement contentions.<sup>1</sup> (A00243:Dkt.459). Specifically, NLG/WTH sought to limit DDR to its 2011 and 2012 Infringement Contentions, which identified only the Priceline website as an accused infringement.<sup>2</sup> (A02624:16-A02626:3).

<sup>1</sup> NLG/WTH also joined defendants' motion *in limine* which sought the same relief. (A00243).

<sup>2</sup> In the Joint Pretrial Order, DDR dropped its infringement allegations concerning US Airways and United and asserted infringement by Priceline, Orbitz, BJs, Cheaptickets, American Airlines, Alaska Airlines, Bookit, Hotwire and Travelnow.

In one of its motions *in limine*, DDR asked that defendants be precluded from making references to prior claims or forms of relief asserted by DDR that had been dropped from the lawsuit and products that it had not accused of infringement. (A02579:8-13).

The District Court granted DDR's motions *in limine* and denied NLG/WTH's motions *in limine*, allowing DDR to introduce evidence about accused websites not listed in its Infringement Contentions. (A02613:19-24, A02627:6-8, A00047). Even though DDR acknowledged that NLG/WTH's source code was the same for all its partner brands (A02626:19-20), the District Court did not let NLG/WTH reference any accused websites that were dropped from the case (US Airways, United) or any websites DDR no longer accused infringement of (American, Alaska). (A00044:1-2).

### **G. The Trial And Verdict**

At the trial from October 8 through October 12, 2012, DDR presented its infringement case through its expert, Keller. Because DDR is a non-practicing entity, its damages were limited to a "reasonable royalty." (A03766:14-24). DDR's damages expert, Mark Chandler, testified that a reasonable royalty rate is a running royalty and should be 5.5% of all of NLG/WTH's revenue from the Accused Websites. (A03806:21-24, A03809:16-23, A08070). This revenue included NLG/WTH sales that took place in ways other than by activating a link

on a partner webpage, such as, by telephone, by clicking a link in an email or finding the NLG/WTH website directly through a web browser search from a consumer's computer. (A03457:24-A03458:6, A08070-A08071). For NLG/WTH, DDR disclaimed any damages after April 2012. (A03769:20-A03770:6, A08070). NLG/WTH's damages expert, Keith Ugone, testified that a reasonable royalty should be a lump-sum payment, in the amount of \$375,000. (A04471:4-18).

On October 12, 2012, the jury rendered a verdict that NLG/WTH directly infringed the Asserted Claims, but did not infringe willfully. (A03078-A03079:Q1, 3). It also found that NLG/WTH did not induce infringement of Claim 17 of the '572 Patent. (A03079:Q2). It awarded damages for the infringement in the amount of \$750,000. (A03080).

#### **H. Post-Trial Motions**

At the close of Plaintiff's case, NLG/WTH moved for Judgment as a Matter of Law ("JMOL"), pursuant to Fed.R.Civ.P. 50(a). (A00247:Dkt.511). At the close of all the evidence, NLG/WTH renewed its JMOL motion, pursuant to Fed.R.Civ.P. 50(b). (A00250:Dkt.539). Specifically, NLG/WTH asked for judgment as a matter of law that 1) DDR failed to provide substantial evidence to support its infringement claims; 2) the Asserted Claims are invalid under 35 U.S.C. §101 for failing to claim patentable subject matter; 3) the Asserted Claims are

invalid under 35 U.S.C. §112 for indefiniteness;<sup>3</sup> 4) the Court improperly excluded evidence of the non-accused websites; and 5) DDR did not meet its burden in proving damages.

On November 7, 2012, DDR filed a motion for judgment, seeking prejudgment and postjudgment interest. (A00250:Dkt.538). NLG/WTH opposed DDR's request for prejudgment interest, on the following grounds: 1) DDR caused an unreasonable delay in the case by filing a request for reexamination of the '572 Patent, which resulted in the case being stayed for four years; 2) DDR is a non-practicing entity and should not be entitled to prejudgment interest because it has no business; and 3) to the extent the District Court was inclined to award prejudgment interest, the interest should be computed only from October 2010 because of DDR's failure to correlate any earlier damages to any proof of infringement. (A00250:Dkt.543).

On June 20, 2013, the Court denied NLG/WTH's JMOL motions and granted DDR's motion for entry of judgment awarding prejudgment interest from January 2006 and postjudgment interest. (A00004-A00035). The District Court entered judgment on June 20, 2013 against NLG/WTH in the amount of \$1,031,404, plus an additional per diem rate of \$131.71 per day from November 1, 2012 through the entry of the Judgment. (A00001-A00003, A00036-A00041).

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<sup>3</sup> In November 2011, the District Court denied defendants' request for leave to file a motion for summary judgment based on indefiniteness. (A00042).

The crux of the problem is that the Asserted Claims are directed to a website which has the same overall “look and feel” or “visually perceptible elements,” as another website. The Asserted Claims relate to an abstract business idea and not a novel method or system. Indeed, the Asserted Claims relate to a “result,” that is, a consumer’s belief that two websites look the same due to common branding.

- 14 -

insufficient evidence presented by DDR's expert regarding the presence of other claim elements to support a verdict. Because this evidence was lacking, the verdict should have been set aside by the District Judge.

Finally, the jury's damages awarded should have been set aside by the District Court because DDR failed to submit evidence that the accused websites were operative for more than a single day. And DDR should not have been awarded pre-judgment interest as a matter of course when it had no operating business. Thus, the District Court erred in refusing to grant NLG/WTH's JMOL motion on those issues.

## **VII. ARGUMENT**

### **A. Standard of Review**

"Whether a claim is drawn to patent-eligible subject matter under §101 is an issue of law" that this Court reviews *de novo*. *In re Bilski*, 545 F.3d 943, 951 (Fed.Cir. 2008). Similarly, a District Court's indefiniteness holding under §112, ¶2 is reviewed *de novo*. *See Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc.*, 723 F.3d 1363, 1369 (Fed.Cir. 2013).

The admission of expert testimony is reviewed for an abuse of discretion. *i4i Ltd. Partnership v. Microsoft Corp.*, 598 F.3d 831, 852 (Fed.Cir. 2010). An abuse of discretion occurs when a trial court's ruling is "based on an erroneous

view of the law or a clearly erroneous assessment of the evidence.” *Bocanegra v. Vicmar Services, Inc.*, 320 F.3d 581, 584 (5<sup>th</sup> Cir. 2003).

Judgment as a matter of law is appropriate when “a reasonable jury would not have a legally sufficient evidentiary basis to find for the party on that issue.” Fed.R.Civ.P. 50(a)(1). This Court reviews the denial of JMOL after a jury verdict under the law of the regional circuit and has interpreted the Fifth Circuit’s standard to require a jury’s determination to be supported by “substantial evidence.” *Orion IP, LLC v. Hyundai Motor Am.*, 605 F.3d 967, 973 (Fed.Cir. 2010); *Mirror Worlds, LLC v. Apple, Inc.*, 692 F.3d 1351, 1357 (Fed.Cir. 2012). “Substantial evidence” is “more than a scintilla, less than a preponderance, and is such relevant evidence as a reasonable mind might accept as adequate to support a conclusion.” *McFadden v. Prudential Ins. Co. of Am.*, No. 12-60569, 2013 WL 1297642, at \*2 (5<sup>th</sup> Cir. April 2, 2013) (quoting *Ellis v. Liberty Life Assurance Co. of Boston*, 394 F.3d 262, 273 (5<sup>th</sup> Cir. 2004)).

**B. The District Court Erred In Failing To Invalidate The Asserted Claims Under 35 U.S.C. §101 As They Impermissibly Cover The Abstract Idea Of Having Two Web Pages Look The Same Through Branding And Lack Any Meaningful Limitations**

The Court should reverse the District Court and its denial of NLG/WTH’s JMOL motion under 35 U.S.C. §101 and hold that the Asserted Claims are unpatentable abstract ideas. Under §101, abstract ideas are “outside of the eligibility bounds of §101.” *Ultramercial, Inc. v. Hulu, LLC*, 722 F.3d 1335, 1341



(Fed.Cir. 2013) (citing *Bilski v. Kappos*, 130 S.Ct. 3218, 3225 (2010)). This Court has held that:

In the case of abstractness, the court must determine whether the claim poses any risk of preempting an abstract idea....To do so the court must first identify and define whatever fundamental concept appears wrapped up in the claim....Then, proceeding with the preemption analysis, the balance of the claim is evaluated to determine whether additional substantive limitations . . . narrow, confine, or otherwise tie down the claim so that, in practical terms, it does not cover the full abstract idea itself.

*Accenture Global Services, Gmbh v. Guidewire Software, Inc.*, -- F.3d --, 2013 WL 4749919, at \*4 (Fed.Cir. Sept. 5, 2013) (internal quotations and citations omitted); *see also Ultramercial*, 722 F.3d at 1344 (“the relevant inquiry is whether a claim, as a whole, includes *meaningful* limitations restricting it to an application, rather than merely an abstract idea.”) (emphasis-in-original).

A claim is not meaningfully limited if 1) “it merely describes an abstract idea or simply adds ‘apply it,’” 2) “it contains only insignificant token pre- or post-solution activity – such as identifying a relevant audience, a category of use, field of use or technological environment,” or 3) “its purported limitations provide no real direction, cover all possible ways to achieve the provided result, or are overly-generalized.” *Ultramercial*, 722 F.3d at 1346.

“[T]he mere reference to a general purpose computer will not save a method claim from being deemed too abstract to be patent eligible.” *Id.* at 1348 (“claims

directed to *nothing more than the idea of doing that thing on a computer* are likely to face larger problems.”); *see also* *Accenture*, 2013 WL 4749919, at \*8 (“simply implementing an abstract concept on a computer, without meaningful limitations to that concept, does not transform a patent-ineligible claim into a patent-eligible one.”). A determination of patent eligibility “focuses on whether the claims tie the otherwise abstract idea to a *specific way* of doing something with a computer, or a *specific computer* for doing something....” *Ultramercial*, 722 F.3d at 1348 (emphasis-in-original).

Here, the District Court erred in failing to hold the Asserted Claims invalid for failure to claim patentable subject matter under §101. A close look at the Asserted Claims and the evidence of record demonstrates that the claims do not cover the specific application of an idea, but cover *only* the results achieved, namely, the branding of web pages for e-commerce outsourcing, or making two e-commerce web pages look alike.<sup>4</sup> Although buried within obfuscatory language, the claims recite only generic functionalities that any general purpose computer can perform and are not tied to a *specific way* of branding of web pages with a

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<sup>4</sup> Although independent claim 13 of the ‘572 Patent and independent claim 19 of the ‘399 Patent are written as systems, “[t]he only difference between the claims is the form in which they were drafted.” Thus, the Court may “correctly treat [] the system and method claims at issue in this case as equivalent for purposes of patent eligibility under §101.” *See Bancorp Services, LLC v. Sun Life Assurance Co. of Canada*, 687 F.3d 1266, 1277 (Fed.Cir. 2012); *see also* *CLS Bank International v. Alice Corp. Pty. Ltd.*, 717 F.3d 1269, 1274 n.1 (Fed.Cir. 2013).

computer, or a *specific computer* for branding of web pages. As admitted by one inventor, the invention is nothing more than the idea of syndicated commerce on the computer using the Internet. (A03207:24-A03208:6). (“[W]e invented this [syndicated commerce] for the Internet, the idea of putting the store in – multiple stores in right locations, right? Taking something that worked in the real world and doing it on the Internet, that was new.”).

Accordingly, this Court should reverse the judgment of the District Court and hold the Asserted Claims invalid for preempting an abstract idea.

1) *The Asserted Claims Relate To The Abstract Idea Of Having Two Web Pages Look The Same, And Not To “Application” of The Abstract Idea, As Confirmed By DDR’s Testimony*

The systems and processes described in the patents-in-suit relate to the abstract idea of making two e-commerce web pages look alike by using licensed trademarks, logos, color schemes and layouts – in other words, the branding of web pages by using what the patents describe as the “look and feel description” or “visually perceptible elements.”

The Asserted Claims do not describe an *application* of an abstract idea because the only allegedly unique feature is the ability to create “the overall impression of being on a . . . host website” by matching a look and feel. (A3320:10-20); (A03221:16-21) (“That whole idea of keeping that – that – that real look and feel and putting the – merchant store into that, that was unique.”);

(A03213:16-20) (“So what we did is you take the host website and you actually would insert the merchant’s site into the host website, but keeping that real look and feel, all right?”) (A03195:8-14) (“We invented a way for retailers wanting to sell online to open up their stores on popular websites all around the Internet without letting visitors feel like they were leaving those popular websites, by matching look and feel really closely.”).<sup>5</sup> Because the Asserted Claims cover the “results” of making two web pages look the same, they impermissibly cover any online system in which one web page is made to look like another web page, namely, all syndicated e-commerce. The claimed systems and processes are not an application of an abstract idea, but focus on the “results” of branding web pages in connection with e-commerce outsourcing. *See In re Brooks*, 90 F.2d 106, 107-108 (C.C.P.A. 1937) (“It is well established that, ‘[i]t is for the discovery or invention of some practicable method or means of producing a beneficial result or effect, that a patent is granted, and not for the result or effect itself.’”) (citation omitted). The Court should invalidate the Asserted Claims for failure to claim patentable subject matter.

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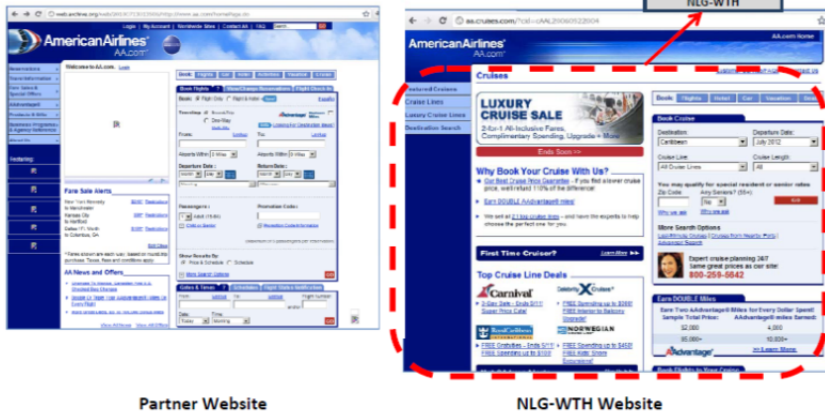
<sup>5</sup> That the patents cover nothing more than the abstract idea of having two web pages look alike through branding was confirmed by Del Ross, a named inventor, when he used the word “idea” at least 25 times to describe the invention during trial and even admitted that he filed the lawsuit because DDR “had learned that there were companies that were using our *ideas*.” (A03246:4-9, 16, 24); (A03205:9, A03208:3, A03209:7, A03210:11-13, A03211:12-13&18-20, A03212:1&8, A03233:16-18, A03234:25, A03235:1-4, A03236:14, A03237:21, A03239:13, A03240:5-6&13, A03247:2-3&9).

Although this Court must not oversimplify the claims, *see Ultramercial*, 722 F.3d at 1344, DDR's Asserted Claims cannot be directed to any *specific application* of the abstract idea of making two web pages look alike, when their own infringement allegations focused solely on the abstract idea of making a website "substantially matching" a host website. (A03738:9-13) ("If the look and feel was no longer substantially matching, then it would not infringe."). All of NLG/WTH's partner websites use the same source code in the same way, yet DDR selectively accused only some websites of infringement, and other websites only for certain time periods. (A03665:14-21). For example, DDR accused the American Airlines website of infringement through July 2010, but withdrew its allegations thereafter. (A03692:5-19). Screen shots of the accused and non-accused American Airlines website appear below, demonstrating that the only difference between the two is the American Airlines logo.<sup>6</sup>

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<sup>6</sup> The dotted lines indicate cruise content supplied by NLG/WTH.

PX 617 – AMERICAN AIRLINES (ACCUSED)



**DX 263 – AMERICAN AIRLINES (NOT ACCUSED)**



(A05963-A05964, A07185-A07186).

DDR’s infringement allegations make clear that the patents-in-suit are not directed to a particular way of achieving a result, or an application of the abstract idea, but rather, are directed to the result achieved, namely, the matching of a “look and feel” or “visually perceptible elements” in an effort to have two e-commerce web pages look like each other. However, the practical effect of claiming the “results” is that NLG/WTH is impermissibly precluded from use of the abstract

idea, namely, having two websites look alike through branding. *O'Reilly v. Morse*, 56 U.S. 62, 120 (1853) (“[H]e claims a patent, for an effect produced by the use of electro-magnetism distinct from the process or machinery necessary to produce it. The words of the acts of Congress . . . show that no patent can lawfully issue upon such a claim.”). Thus, the Asserted Claims are not patentable subject matter and should not be entitled to patent protection.

2) *The Asserted Claims Are Not “Meaningfully Limited” Because They Cover All Possible Ways To Make Two Web Pages Look The Same Through Branding And Do Not Tie The Abstract Idea To “A Specific Way Of” Or “Specific Computer For” Making Web Pages Look The Same*

The Asserted Claims lack substantive limitations sufficient to avoid preempting the abstract idea of making two webpages look similar. Specifically, they are not “meaningfully limited to the application of an abstract idea” because they contain “insignificant or token pre- or post-solution activity” and “provide no real direction, cover all possible ways to achieve the provided result, . . . [and] are overly-generalized.” *Ultramercial*, 722 F.3d at 1346.

Claim 13 of the '572 Patent recites “a data store,” a “web page having a link,” a “computer processor,” and that the computer processor is “programmed,” all conventional elements which must be present to serve a web page. (A00162). Similarly, Claim 17 of the '572 Patent recites steps of “storing a look and feel description associated with a first website in a data store,” “including within a web

page of the first website . . . a link” and “upon receiving an activation of a link, serving to the visitor computer a composite web page,” all steps conventionally performed for a web page to be accessed. (A00162). The Asserted Claims of the ‘399 Patent similarly recite components such as computer stores and servers and their functionalities. (A00204-A00205). These purported limitations are nothing more than generic functionalities that any general computer can and must perform to display a web page. *Ulramercial*, 722 F.3d at 1348 (“If, to implement the abstract concept, one *must* perform the additional step, or the step is a routine and conventional aspect of the abstract idea, then the step merely separately restates an element of the abstract idea, and thus does not further limit the abstract concept to a practical application.”) (citing *Prometheus*, 132 S.Ct. at 1298) (emphasis-in-original).<sup>7</sup> Tying the claims to the internet and routine computer functions does not add substantive limitations sufficient to avoid preempting the abstract idea.

<sup>7</sup> By April 1998, the practice of creating and presenting web pages to a user was well established. (A08725). DDR simply took the concept of making two different pages of advertising material resemble each other and implemented it using conventional computer technology. (A03314:18-20, A03351:6-10).



Without the general computer limitations, nothing in the claim remains but the abstract idea of making one website look like another through branding.<sup>8</sup> See *Bancorp Services v. Sun Life Assur. Co. of Canada*, 687 F.3d 1269, 1279-80 (Fed.Cir. 2012). (“When the insignificant computer-based limitations are set aside from those claims that contain such limitations, the question under §101 reduces to an analysis of what additional features remain in the claims.”). The Asserted Claims do not claim any patentable subject matter under §101.

This Court has recognized that the “machine-or-transformation” test of *In re Bilski*, 545 F.3d 943, 954 (Fed.Cir. 2008), *aff’d on other grounds*, 130 S.Ct. 3218 (2010), “served well as a tool to evaluate the subject matter of the Industrial Age processes” but “has less application to the inventions of the Information Age.” *Ultramercial*, 722 F.3d at 1343. While there appears to be no single “test” for patent eligibility (*Bilski*, 130 S.Ct. at 3226), it is clear that adding conventional, well understood elements to an abstract idea does not render it patentable. *See e.g.*,

<sup>8</sup> This case is distinguishable from *Ultramercial* because of its procedural posture, as acknowledged by the Court in *Accenture*. *Accenture*, 2013 WL 4749919, at \*10. Unlike *Ultramercial*, here there are no “myriad ways to accomplish [the] abstract concept that do not infringe the[] claims.” *Ultramercial*, 722 F.3d at 1353. Common sense alone establishes that the limitations of the Asserted Claims are inherent in the idea of syndicated e-commerce. The elements of the Asserted Claims are similar to the claims of *Bancorp*, *CLS Bank* and *Accenture*, which contain only generalized computer-based limitations. See e.g., *Accenture*, 2013 WL 4749919, at \*9.

*Prometheus*, 132 S.Ct. at 1297–98. Because the claims asserted here do no more than that, they fail to clear the §101 threshold.

DDR has admitted it did not invent any of the generic computer elements. (A03311:23-A03316:25). Indeed, when asked if he invented syndicated commerce, Ross stated, “No. The idea of having stores in a lot of different places is not something we came up with.” (A03207:21-23). However, when asked what he did invent, Ross stated, “we invented this [syndicated commerce] for the Internet, the idea of putting the store in – multiple stores in right locations, right? Taking something that worked in the real world and doing it on the Internet, that was new.” (A03207:24-A03208:6).

Application of an abstract idea to the Internet<sup>9</sup> or through the use of computers is exactly what the Supreme Court and this Court have held not to be patentable. *CLS Bank*, 717 F.3d at 1281; *Bilski*, 130 S.Ct. at 3231 (“limiting an abstract idea to one field of use or adding token postsolution components did not

<sup>9</sup> This Court has held that it is obvious to apply previously known methods to the Internet. *See Sovereign Software LLC v. Newegg Inc.*, 705 F. 3d 1333, 1344 (Fed.Cir. 2013) (“Open Market did not invent the Internet, or hypertext, or the URL. Newegg is correct that the use of hypertext to communicate a ‘statement document’ or ‘transaction detail document’ was a routine incorporation of Internet technology into existing processes.”); *see also Muniauction, Inc. v. Thomson Corp.*, 532 F.3d 1318, 1327 (Fed.Cir. 2008) (conducting previously known methods through an Internet web browser was obvious because it amounted to no more than applying the use of the Internet to existing electronic processes at a time when doing so was commonplace.).

make the concept patentable.”); *Parker v. Flook*, 437 U.S. 584 (1978) (a mathematical formula for calculating alarm values, despite being primarily useful for computerized calculations and being limited to the field of catalytic conversion of hydrocarbons, was not patentable); *Gottschalk v. Benson*, 409 U.S. 63, 71-72 (1972) (implementing a method for converting binary-coded-decimal numerals into pure binary on a general purpose computer was not patentable subject matter); *Accenture*, 2013 WL 4749919, at \*8 (“attempts to limit the abstract concept to a computer implementation to a specific industry thus do not provide additional substantive limitations to avoid preempting the abstract idea....”); *CLS Bank*, 717 F.3d at 1287 (“adding generic computer functions to facilitate performance provides no substantial limitation and therefore is not ‘enough’ to satisfy §101.”); *Bancorp*, 687 F.3d at 1278-80 (claims directed at managing a stable value protected life insurance policy invalid because they only used computers for generic functions including calculations and value storage); *Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1333 (Fed.Cir. 2012) (a computer-aided limitation does not sufficiently limit the claim to an application of an idea); *CyberSource Corp. v. Retail Decisions Inc.*, 654 F.3d 1366, 1376-77 (Fed.Cir. 2011) (a method of detecting credit card fraud was patent ineligible, notwithstanding reciting the use of existing computers and the Internet.). The use of the routine functionalities of a

general purpose computer through the Internet does not transform an abstract idea into patentable subject matter under §101.

The failure of the Asserted Claims to meet the §101 test is highlighted by the lack of any limitation, for example, software for capturing a host page or an algorithm used for branding a web page for e-commerce outsourcing. The claims do not define a particular way of achieving the matching of the look and feel description and visually perceptible elements,<sup>10</sup> but rather claim all ways to do so.<sup>11</sup> *See e.g., Dealertrack*, 674 F.3d at 1333-34 (finding the patent invalid because, *inter alia*, it “does not specify how the computer hardware and database are

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<sup>10</sup> The “automatic capture,” or “wizard feature,” in the ‘135 Patent was dropped against NLG/WTH. The only testimony about what the patents allegedly covered related to the ability to “capture the real look and feel.” (A03206:21-23). This testimony demonstrates that the Asserted Claims were written in an effort to cover the results of making two web pages look the same, without regard to any process of how to do so.

<sup>11</sup> That DDR’s Asserted Claims cover an abstract idea is further supported by evidence that the District Court prevented NLG/WTH from introducing at trial, namely evidence showing that NLG/WTH was making two webpages look like one another through branding, prior to the earliest priority date of the patents-in-suit. By January 1998, NLG/WTH already had created and commercialized web pages that had a similar “look and feel” as other web pages. (A08714) (“The operations will be identical to the current web-sites only with a different program name, address and logo. All specials and information will be the same. There will be a link from the Atevo home page directly to the general “NLG WebSite” where all package and cruise listings are located.”). Copies of the website [www.atevo.com](http://www.atevo.com) and [www.atevovactionoutlet.com](http://www.atevovactionoutlet.com) from December 1998, obtained from [www.archive.org](http://www.archive.org), show a box with the “Atevo logo” appearing on both sites. (A07234-A07236). This evidence demonstrates the preemptive impact of the claims. *Ultramercial*, 722 F.3d at 1339.

specially programmed to perform the steps claimed in the patent . . . [T]he claims of the [patent] were construed not to be limited to any particular algorithm.”); *CyberSource*, 654 F.3d at 1372 (invalidating claims that were not directed to any particular fraud detection algorithm, and had a broad scope that extended to “any method of detecting credit card fraud based on information relating past transactions to a particular ‘Internet address,’ even methods that can be performed in the human mind.”)

DDR's attempt to stretch its patent to cover anything that achieves the desired result of branding a webpage to make it look like another webpage is impermissible and violates §101. *See Ultramercial*, 722 F.3d at 1344-46.

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Because it is clear that DDR's patent claims do not cover patent-eligible subject matter as a matter of law, the judgment of the District Court should be reversed.

**C. The District Court Erred In Concluding That The Asserted Claims Were Not Indefinite Under 35 U.S.C. §112 As The Terms “Look And Feel Description” and “Visually Perceptible Elements” Clearly Call For A Subjective Determination**

All of the Asserted Claims are invalid because the terms “look and feel description” and “visually perceptible elements” are indefinite.<sup>12</sup> To be valid, a patent claim must “particularly point[ ] out and distinctly claim[ ] the subject matter which the applicant regards as his invention.” 35 U.S.C. §112, ¶2. The reasoning behind this requirement is simple – patent claims are required to provide notice to potential infringers concerning the metes and bounds of the invention so that they may avoid infringement. *See General Electric Co. v. Wabash Appliance Corp.*, 304 U.S. 364, 369 (1938) (“[t]he inventor must inform the public during the life of the patent of the limits of the monopoly asserted so that it may be known which features may be safely used or manufactured without a license and which may not.”). The purpose of the definiteness requirement of §112, ¶2, can be met only by ensuring that the claims delineate the scope of the invention using language that adequately notifies the public of the patentee’s right to exclude. *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1347 (Fed.Cir. 2005); *Honeywell Int’l, Inc. v. International Trade Comm.*, 341 F.3d 1332, 1338 (Fed.Cir. 2003).

<sup>12</sup> The construction for “visually perceptible elements” was agreed to be “look and feel elements that can be seen.” (A01062). Because it is effectively the same as “look and feel description,” both limitations are indefinite for the same reasons.

A patent claim violates §112, ¶2 as indefinite if it contains a term that is “completely dependent on a person’s subjective opinion.” *Datamize*, 417 F.3d at 1350. Proof of indefiniteness requires a showing “by clear and convincing evidence that a skilled artisan could not discern the boundaries of the claim based on the claim language, the specification, and the prosecution history, as well as her knowledge of the relevant art area.” *Halliburton Energy Services, Inc. v. M-I LLC*, 514 F.3d 1244, 1249-50 (Fed.Cir. 2008) (affirming holding of indefiniteness).

All of the Asserted Claims include the phrase “look and feel description associated with a host website” (or “a first website”) (or “visually perceptible elements visually corresponding to the source page”). “Look and feel” was defined by the Court to be “a set of elements relating to visual appearance and user interface conveying an overall appearance identifying a website; such elements include logos, colors page layout, navigation frames, ‘mouse-over’ effects, or others [sic] elements consistent through some or all of the website.”<sup>13</sup> (A01062).

The District Court glossed over the subjective nature of these claims by finding that it was the jury’s job to compare the two websites and decide whether they were infringed and that “[s]uch a comparison does not render the jury’s

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<sup>13</sup> That the parties and the Court articulated a definition of “look and feel” and “visually perceptible” elements does not end the inquiry on indefiniteness. *See Halliburton*, 514 F.3d at 1251 (“Even if a claim term’s definition can be reduced to words, the claim is still indefinite if a person of ordinary skill in the art cannot translate the definition into meaningfully precise claim scope.”).

decision subjective.” (A00008). However, the District Court’s conclusory finding ignores that the infringement verdict was impermissibly based on the “subjective perception” of each of the jurors. The patents-in-suit provide no guidance about *how much* of a look and feel is sufficient to trigger this user perception. Indeed, given the testimony and evidence at trial, along with DDR’s constantly changing infringement allegations, it was error for the District Court to deny NLG/WTH’s JMOL motion on indefiniteness. Because there is no objective standard for determining whether a pair of web pages have the same “look and feel,” the Asserted Claims are indefinite under §112, ¶2. The District Court erred in failing to grant NLG/WTH’s JMOL motion.

*1) The Testimony of DDR’s Trial Witnesses And Its Inconsistent Infringement Contentions Confirms That The Asserted Claims Are Indefinite*

The testimony and evidence demonstrates that the bounds of the patents-in-suit are subjective and far from clear. When asked about “look and feel,” the explanation offered by inventor Del Ross was that the term meant the user’s “sense” of the appearance of a website. (A03208:23-A03209:16) (“Not just taking one element and reusing that, but actually being able to identify the parts of a website that give the user the sense of where they are....”). Ross repeatedly referred to an undefined “real” look and feel, a term which he admitted is not in the Asserted Claims and could only be distinguished from a “fake” look and feel that



relates to “some other site or some other thing.” (A03283:18-A03288:2); (*See also* A03206:18-25, A03208:23-A03209:16, A03213:13-25, A03218:3-10, A03221:13-21). The testimony of Joe Michaels, another inventor, confirms that the determination of “look and feel” is a subjective inquiry. He stated that the “innovative part of their technology” was that “you wouldn’t be able to tell. A typical user wouldn’t notice that they were no longer on the same computers that they were when they were on that host website, right? To – to them, the overall impression was that they were still in that host website.”<sup>14</sup> (A03215:9-17).

DDR’s expert witness Keller admitted that the application of the “look and feel” elements was completely subjective and determined from the perspective of “your eyes.” (A03725:4-10). In connection with one of Digital River’s accused websites, Keller contended that the web pages “look rather similar. They’re about as similar in appearance as my twin girls . . . It’s clear to me . . .” (A03593:11-

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<sup>14</sup> Another inventor, Richard Anderson, testified that they “developed a ‘wizard.’ It was a kind of step-by-step that the host could follow to give us the information we needed to replicate their – their website on our servers.” (A03342:19-22). The “innovative part” of DDR’s technology was the ability to “truly replicate as much as possible . . . [of the] host website.” (A03343:5-21). The only “technique” described for this replication of the “real look and feel” was the “wizard.” (A00672, A00699, 14:30-40, A00720, A00747, 13:29-39). DDR’s dropping of the “wizard” patent and stretching of the Asserted Claims to cover the generalized results of a system and process of making web pages look the same is not supported by the specification. The patents-in-suit impermissibly claim more than what was actually disclosed in the patents in violation of 35 U.S.C. §112.

25). While Keller's twin girls to him may be similar in appearance, that may not be the case to a different observer.

Keller's failure to articulate a basis for concluding that the accused NLG/WTH partner web page pairs are similar enough to have the same "look and feel," while other web page pairs are sufficiently dissimilar not to have the same look and feel, confirms the indefiniteness, especially since DDR agreed that all of the websites operated on the same platform. (A03665:19-21, A03688:25-A03689:10). NLG/WTH did not have the opportunity to pursue this defense because the District Court precluded it from questioning witnesses or eliciting testimony relating to non-accused websites.<sup>15</sup> (A00043) (Reference to Prior Claims or Forms of Relief); (A00044) (Reference to Products . . . DDR Has Not Accused of Infringement); *see also* (A03731:10-A03734:23). The inconsistencies in DDR's contentions concerning the accused websites and in the application of the "look and feel" elements of the Asserted Claims to accused and non-accused

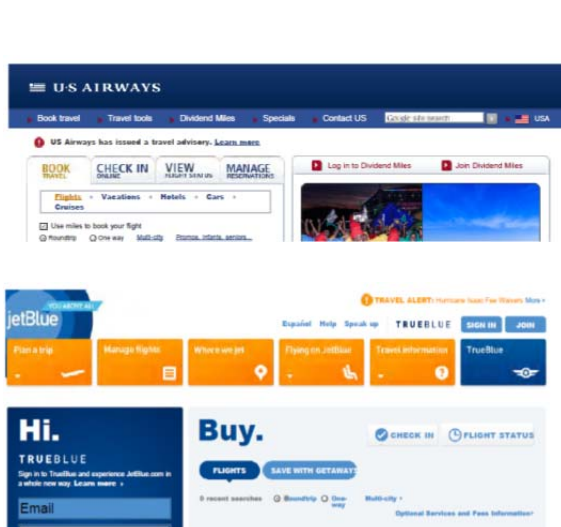
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<sup>15</sup> The District Court erred in concluding that Keller's testimony was not inconsistent relying on his testimony that he had not "made an opinion as to whether they are substantially the same or not right now in my report." (A00029). Keller clearly had an opinion about whether the current Alaska Airlines and American Airlines website pairs were substantially the same because he accused them both of infringement in his initial expert report. (A08815). He dropped those claims in later versions of his report.

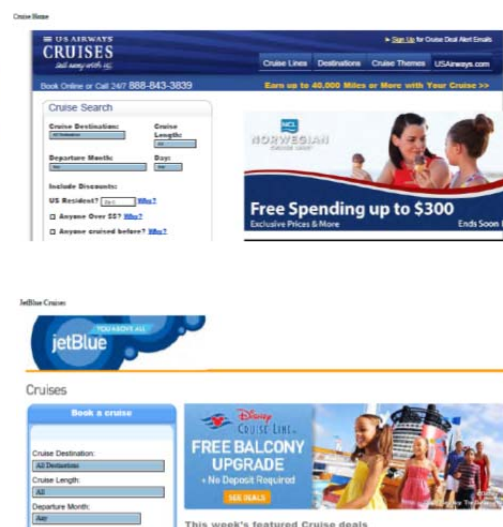
websites were directly relevant to the issue of invalidity for indefiniteness.<sup>16</sup> The District Court’s preclusion of trial testimony related to the non-accused sites was an abuse of discretion. Fed.R.Evid. 403; *OddzOn Prods., Inc. v. Just Toys, Inc.*, 122 F.3d 1396, 1407 (Fed.Cir. 1997) (“Given the low threshold for relevancy, it is clear that the evidence was relevant. It has a ‘tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence.’ Fed.R.Evid. 401.”).

Although DDR argued that all of the NLG/WTH websites operated on the same platform (*see* A0665:19-21, A03688:25-A03689:10), DDR did not charge the following websites with infringement, presumably admitting that they were not “substantially matching:” (A03738:9-13)

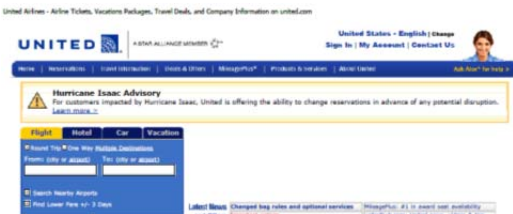
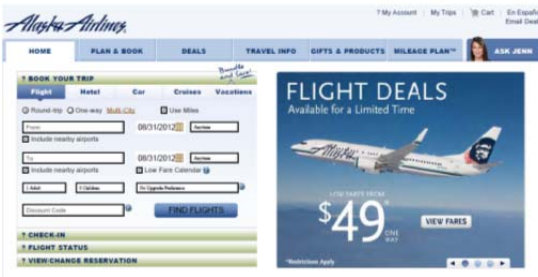
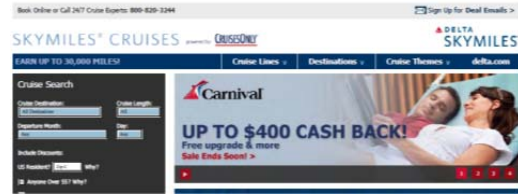
### Host Web Page



### NLG/WTH Web Page

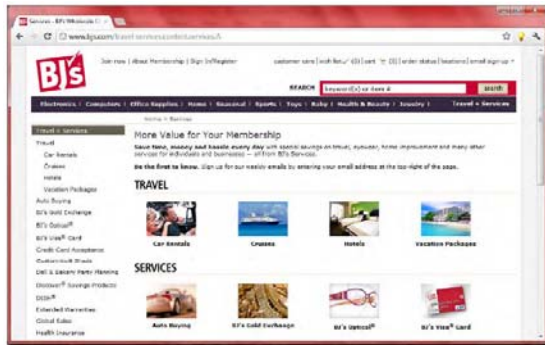
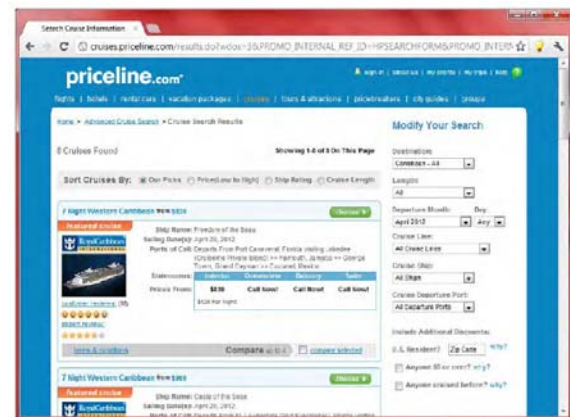
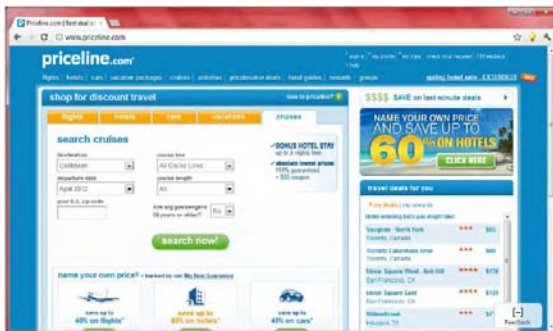
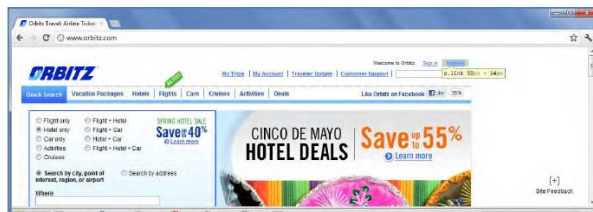


<sup>16</sup> The non-accused websites are also directly relevant to the issues of non-infringement and invalidity under §101.



(A07228-A07229, A0709, A0711, A07200, A07202, A07185-A07186, A07180, A07182, A07225-A07226).

On the other hand, DDR contended that the following sites were “substantially matching:”

Host Web PageNLG/WTH Web Page



(A05945-A05946, A05924-A05925, A05931-A05932, A05963-A05966).

All of those website pairs have elements in common. Whether they are “substantially matching” is solely in the eyes of the beholder. Indeed, the current American Airlines web page and the corresponding NLG/WTH web page are no more or less similar in appearance than the web page pairs for the accused websites Orbitz, Priceline and BJs. Because infringement here requires a subjective opinion and there are no objective standards, the patents fail to notify the public concerning the bounds of the invention.

2) *The Specification Confirms the Indefiniteness of “Look and Feel Description Associated with a Host Website” (or “a First Website”) And “Visually Perceptible Elements Corresponding To The Source Page”*

The common specification of the patents-in-suit confirms the subjective nature of the phrases “look and feel description associated with a host website.” (or “a first website”) and “visually perceptible elements corresponding to the source page.”<sup>17</sup> The specification states that the web pages are served by someone other than a host, “but with the host’s look and feel. *Such pages give the viewer of the page the impression that she is viewing pages served by the host.*” (A00149, 3:22-24, A00193, 3:22-24).

<sup>17</sup> The term “visually perceptible elements” does not appear in the specification of the patents-in-suit. “Visually perceptible elements” was construed to mean effectively the same thing as “look and feel.” (A01062).

However, the patents-in-suit fail to provide any guidance or limitation on the scope of these terms. The common specification offers only a list of exemplary “look and feel elements” such as “logos, colors, page layout, navigation systems, frames, ‘mouse-over’ effect, or other elements that are consistent through *some or all* of a Host’s Website” (A00154, 14:11-14) (emphasis added), but fails to teach any combination or minimal set of elements that are necessary to satisfy the look and feel requirement. *Datamize*, 417 F.3d at 1350-52 (list of elements, absent objective criteria explaining the number or combinations of them, rendered the claims indefinite). Indeed, the specification’s examples of “look and feel” elements do not objectively explain the requisite level of “look and feel associated with the host website” (or “a first website”) that would ensure that every website or web page user will have an identical perception that he or she remains on the original website or web page.<sup>18</sup>

Simply put, the inventors failed to inform the public in any objective manner, as to which, how many, and where these elements should be used. As a result, the public and NLG/WITH are left to “wonder” about such things as: (1) would any one, two or three of the so-called “look and feel elements” be enough to create this “perception” for every user every time; (2) would the “perception” for every user be the same every time if the background color is the same on both web

<sup>18</sup> The prosecution histories also provide no objective criteria.

pages, but the text color is not; (3) are identical headers enough to create the required “perception” for every user every time; (4) would a difference in the position of a logo be enough to change the “perception” of a user; and/or (5) would the “perception” for every user be the same every time if the same header were used, but the central content of the two pages had different layouts?<sup>19</sup> This mystery is particularly evident given DDR’s inconsistent infringement allegations. For example, it is unclear why the BJ’s website is an infringement, and the US Airways website is not.<sup>20</sup> Both have similar logos and colors, which based on Keller’s testimony appear to be the only requirements for alleged infringement. (*See e.g.*, A03738:14-A03739:5). Indeed, if NLG/WITH wanted to re-design its BJs website to look more like the non-accused US Airways website, it is unknown what more it would need to do to avoid infringement. As a result, neither

<sup>19</sup> In this case, the central content of any two composite web pages always will have different layouts because NLG/WITH compiles and generates information concerning cruises. The information is consistent throughout NLG/WITH operated websites and is revised periodically to reflect available cruises and prices. But, this information does not appear on any partner website.

<sup>20</sup> The only websites listed in DDR's Infringement Contentions in this lawsuit were Priceline, United and US Airways. (A08759-A08761).



NLG/WITH nor the public can determine the limits of the monopoly.<sup>21</sup> The claim limitations “look and feel description” and “visually perceptible elements” lack an objective anchor as required by §112, ¶2, because the patents-in-suit leave the public with an unacceptable uncertainty concerning elements which cannot be used in a syndicated commerce web page.

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Accordingly, the intrinsic and extrinsic evidence lead to the same conclusion -- the patents-in-suit provide no objective standard for determining whether “a look and feel description” and “visually perceptible elements” give the viewer of the page the impression that he/she is viewing pages served by the host webpage. The patents fail to notify the public as to the bounds of the invention, and the Court should reverse the District Court’s judgment and find that they are indefinite as a matter of law.

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<sup>21</sup> For the Alaska Airlines non-accused website, DDR’s position was that the NLG/WITH served webpage “had a different look and feel.” (A03488:12-24). Yet, the only difference in the “look and feel” elements, as identified by Keller, is that the logos are placed in a different order. If boundaries of the claims come down to the particular placement of trademarks, then DDR’s claims are indefinite and non-statutory.

**D. The District Court Abused Its Discretion By Allowing DDR's Infringement Expert To Testify About Conclusory Opinions, Theories That Were Disclosed Late, And NLG/WTH Websites That Were Not Accused In Its Infringement Contentions**

*1) Keller's Conclusory And Late Disclosed Opinions Should Have Been Precluded*

The District Court abused its discretion by allowing DDR's expert Keller to submit conclusory opinions and to testify about theories that were disclosed on the eve of trial, particularly, opinions relating to NLG's source code. In his expert report, submitted on May 18, 2012 (and in later versions), Keller did not provide any claim charts, and limited his analysis to conclusory opinions about whether the accused websites met the elements of the Asserted Claims. Keller directly analyzed only three accused websites, namely, Priceline, BJs and Orbitz. (A07612-A07617). He gave conclusory opinions that six other partner websites "most likely" infringe by providing cursory summaries of the allegedly similar look and feel elements. (A07612). His analysis of the independent claims of the '399 Patent was limited to the conclusion that the claims were infringed "for at least the reasons explained with respect [sic] '572 Claims 13 and 17." (A07621-A07623). During the trial, the District Court overruled NLG/WTH's objection to Keller's testimony, and allowed him to testify about alleged infringement by all

nine accused websites and alleged infringement of the claims of the '399 Patent.  
(A03619:7-A03621:23, A03628:17-20, A03630:24-A03631:9).<sup>22</sup>

2) *It Was Unfair And Prejudicial To Allow DDR To Introduce Evidence Of Websites That Were Not Identified In Its Infringement Contentions, While At The Same Time Preclude NLG/WITH From Introducing Evidence Of “State Of The Art” Because Such Evidence Was Not Identified In Its Invalidity Contentions*

It was an abuse of discretion for the District Court to preclude NLG/WTB from relying on evidence and testimony which was not in its Invalidity Contentions, and at the same time allow DDR to accuse websites of infringement which were not in its Infringement Contentions.<sup>23</sup>

The Local Patent Rules require that the identification of each product accused of infringement to “be as specific as possible,” including name, and model number, if known. P.R. 3-1(b). The Local Patent Rules have a “good cause” requirement for amending infringement contentions which compels parties “to crystallize their theories of the case early in the litigation.” *Nike, Inc. v. Adidas*

<sup>22</sup> Keller’s checking of boxes on claim charts (which were not in his report) through conclusory statements without any supporting facts or analysis was improper. *See Innogenetics, N.V. v. Abbott Labs.*, 512 F.3d 1363, 1376 n.4 (Fed.Cir. 2008) (“Conclusory expert reports, eleventh hour disclosures, and attempts to proffer expert testimony without compliance with Rule 26 violate both the rules and principles of discovery, and the obligations lawyers have to the court. Exclusion and forfeiture are appropriate consequences to avoid repeated occurrences of such manipulation of the litigation process.”).

<sup>23</sup> NLG/ WTH relies upon the anticipation invalidity defense presented by Digital River, which is incorporated by reference.

*Am. Inc.*, 479 F.Supp.2d 664, 667 (E.D.Tex. 2007) (quoting *O2 Micro Int'l Ltd. v. Monolithic Power Sys., Inc.* 467 F.3d 1355, 1364 (Fed.Cir. 2006)).

DDR served amended infringement contentions on January 23, 2012, with leave of the Court, but did not seek leave to file any other amendments to its infringement contentions. (A01183-A01186). The contentions identified United, US Airways, and Priceline as accused websites. (A08759-A08761) However, in the Joint Pretrial Order filed on September 13, 2012, a few weeks before trial, DDR identified the accused websites as: Priceline, Orbitz, BJs, American Airlines, Cheaptickets, Hotwire, BookIt, Travelnow and Alaska Airlines. (A01995). The District Court denied NLG/WTH's motion *in limine* to preclude DDR from introducing evidence and argument relating to any websites other than Priceline. (A02625:15-A2626:3, A2627:6-8).

At the same time, the District Court granted DDR's motion *in limine* to strike NLG/WITH's "state of the art" evidence for failure to comply with the Local Patent Rules. (A02613:19-24)

It was unfair and prejudicial to hold NLG/WTH to one standard, and DDR to another. The District Court's failure to limit DDR to the websites identified in its Infringement Contentions was an abuse of discretion.

## Verdict Because It Was Not Supported By “Substantial Evidence”

The District Court erred in denying NLG/WTH's JMOL motion of non-infringement and failing to set aside the jury's verdict of infringement because the verdict was not supported by "substantial evidence." To show literal infringement of a patent, a patentee must supply sufficient evidence to prove that the accused system or process meets every element or limitation of a claim by a preponderance of the evidence. *See Lemelson v. United States*, 752 F.2d 1538, 1551(Fed.Cir.1985).

DDR focused only on the indefinite terms “look and feel description” and “visually perceptible elements,” as confirmed by Keller when he stated that “[i]f the look and feel was no longer substantially matching, then it would not infringe.” (A03738:9-13). However, in considering “look and feel,” DDR improperly focused on the colors and logos and ignored the District Court’s claim construction which requires a consideration of the “overall appearance” of a website. Because the Accused Websites do not have the same “overall appearance” as the host web pages, they could not infringe the Asserted Claims.

In addition, DDR failed to establish all of the requisite claim elements for all of the accused websites. DDR failed to introduce any evidence that the NLG/WTH's "computer processor" is "in communication through the Internet with the host web page," as required by Claim 13 of the '572 Patent. It conceded that

NLG/WTH did not perform the step of “including, within a web page of the first website . . . a link,” as set forth in Claim 17 of the ‘572 (A03678:23-25), and provided no evidence that NLG/WTH “directed and controlled” other parties to do so. DDR also failed to submit evidence that NLG/WTH automatically identifies or recognizes the source web page as required by Claims 1 and 19 of the ‘399 Patent.<sup>24</sup>

Finally, DDR failed to introduce any evidence of infringement by any accused website for more than one day. And, contrary to DDR's expert's testimony, infringement of the '399 Patent could not have occurred before it issued on October 19, 2010.

Because of DDR's failure to prove that the Asserted Claims cover NLG/WTH's accused websites, the jury's determination of infringement was not supported by substantial evidence, and should have been set aside.

1) DDR Failed To Introduce Substantial Evidence That The Accused Websites Convey The Same “Overall Appearance”

DDR presented its infringement case entirely through its expert, Arthur Keller. Keller’s focus was on the *colors and logos* on the NLG/WITH web pages, and whether those elements “substantially match” the elements on the host web page. For the Orbitz web page, Keller concluded that the colors and graphic

<sup>24</sup> Since none of the independent Asserted Claims were infringed, the dependent Asserted Claims could not have been infringed.

images make the NLG/WTH page “substantially match.” (A03671:12-A03673:13, A03680:11-18). For the Priceline web page, Keller identified only the background colors as providing the “substantial[] match in look and feel.” (A03683:18-A03684:7, A03684:21-A03685:12, A03686:15-20). For the other accused websites (BJs, American Airlines, Alaska Airlines, Cheaptickets, Bookit, Hotwire and Travelnow), Keller failed to identify any elements that were the same or “substantially matching.”<sup>25</sup> (A03690:4-15, A03693:5-18, A03694:10-A03695:8, A03696:20, A03697:23-A03699:16, A03699:23-A03701:14). DDR’s failure to identify any “look and feel” elements for a majority of the accused websites demonstrates the lack of substantial evidence to support the infringement verdict. *McFadden*, 2013 WL 1297642, at \*2.

To the extent that Keller identified any “look and feel” elements for the Orbitz and Priceline web pages, his opinion should have been disregarded because it “was based on an incorrect understanding of [the Court’s] claim construction.” *See Cordis Corp. v. Boston Scientific Scimed, Inc.*, 658 F.3d 1347, 1357-58 (Fed.Cir. 2011). The District Court defined “look and feel” to be “a set of elements related to visual appearance and user interface conveying an overall appearance, identifying a web site . . .” – not whether the “look-and-feel elements

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<sup>25</sup> DDR impermissibly referred to a summary demonstrative that was not in evidence.

do match . . . substantially.” (A03689:1-10). Whether or not a website conveys the same “overall appearance” is different from comparing discrete elements on a web page to determine if they are “substantially matching.”<sup>26</sup> Because DDR’s expert did not apply the proper claim construction in its analysis, the evidence presented at trial did not and could not support the jury’s infringement verdict.

NLG/WTH's web pages principally contain NLG/WTH's own cruise information. Thus, the host web page and corresponding NLG/WTH web page cannot have the same "overall appearance." For example, the screen shots below show a comparison between the American Airlines and Alaska Airlines host web pages and the corresponding NLG/WTH web pages, and show the extensive differences between the "overall appearances" of the web pages, including, but not limited to, the central content which is clearly different – one is flights and the other is cruises:

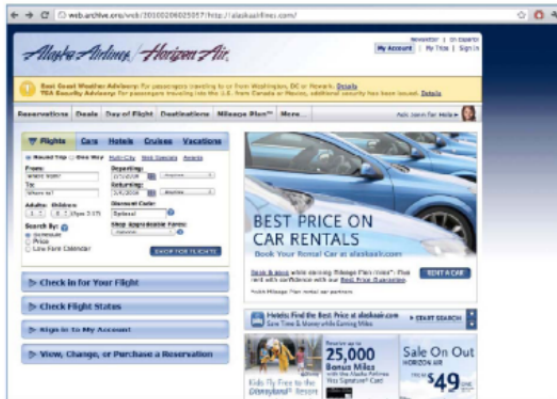
<sup>26</sup> NLG/WTH’s accused websites are not any more or less similar than the prior art web pages that Digital River introduced as anticipating the Asserted Claims. In light of Keller’s application of the “look and feel” elements, it was inconsistent for the jury to have found NLG/WTH liable for infringement of the Asserted Claims and for DDR to avoid a finding of anticipation of the same patent claims in light of the Digital River prior art. “A patent may not, like a ‘nose of wax,’ be twisted one way to avoid anticipation and another to find infringement.” *Amazon.com, Inc. v. Barnesandnoble, Inc.*, 239 F.3d 1343, 1351 (Fed.Cir. 2001) (citing *White v. Dunbar*, 119 U.S. 47 (1886)).



PX 617 – ALASKA AIRLINES (ACCUSED)

Content Provided By  
NLG-WTH

NLG-WTH  
Logo

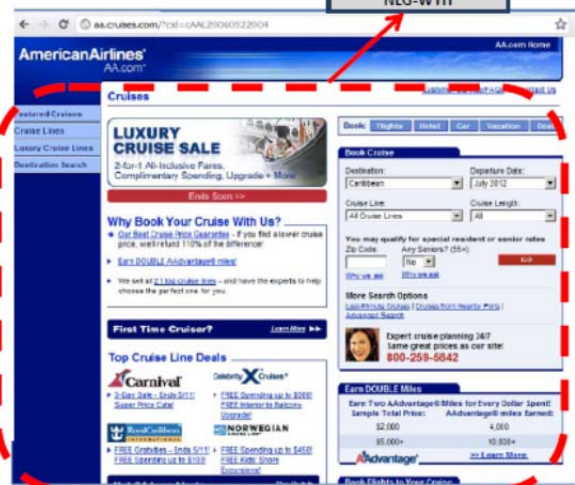


Partner Website

NLG-WTH Website

PX 617 – AMERICAN AIRLINES (ACCUSED)

Content Provided By  
NLG-WTH



Partner Website

NLG-WTH Website

Given that the “overall appearance” of the two web pages is not the same, a jury could not reasonably conclude that the NLG/WTH partner web page pairs satisfy the “look and feel” elements of the Asserted Claims. Accordingly, this Court should reverse the infringement judgment.

2) *The Accused Websites Cannot Satisfy The Element That The “Computer Processor Is In Internet Communication With The Host Website” As Required By Claim 13 of the ‘572 Patent*

There is no evidence, much less substantial evidence, to support the jury’s verdict that Claim 13 of the ‘572 Patent was infringed. The NLG/WTH Accused Websites do not have a “computer processor” that is in Internet communication with the host web page.

DDR’s expert testimony on this point was nonsensical and contrary to the plain language of the claims, which requires that 1) the “computer processor” be in communication through the Internet with the host web page” and 2) the “visitor computer” be “in Internet communication with the host web page.” In other words, the claim requires a three-party relationship, with the computer processor in Internet communication with the host web page, and the visitor computer also in Internet communication with that same host web page.

Keller testified that this element is met “when a link is clicked on or activated on the host webpage” because the “host webpage moves from the host to the visitor computer.” (A03674:17-25, A03740:5-24). However, Keller’s testimony makes no sense because the claim language requires that the visitor computer also be in Internet communication with the host web page. The parties agreed upon a construction for “host” and “web page” and DDR did not argue that those terms were *not* to be construed identically in the claims. Indeed, the term

“the host web page” in clause (b) of the claim must be referring to the same term as “a host web page” in clause (a) because “[a] word or phrase used consistently throughout a claim should be interpreted consistently.”<sup>27</sup> *Epcon Gas Sys., Inc. v. Bauer Compressors, Inc.*, 279 F.3d 1022, 1030-31 (Fed.Cir. 2002). In addition, there is nothing in the written description that redefines “host web page” in the second instance of clause (b) “so as to put a reasonable competitor or one reasonably skilled in the art on notice that the patentee intended to so redefine that claim term.” *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357 (Fed.Cir. 1999).

Keller’s testimony improperly conflates the visitor computer with the host web page to find the existence of the communication between the computer processor and the host web page through the Internet, and eliminates the required Internet communication between the visitor computer and the host web page. NLG/WTH’s expert, Stephen Gray, testified that there was no connection between the host web page and the NLG/WTH server and that the only connection to the NLG/WTH server was with a visitor computer. (A04369:23-A04377:18).

Substantial evidence did not support the jury’s verdict that the accused websites have a computer processor that is in Internet communication with the host website. NLG/WTH did not infringe Claim 13 of the ‘572 Patent.

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<sup>27</sup> The phrase “host web page” in clause (b) is used with the antecedent, “the,” so the term should be construed consistently throughout the claim.

3) *The Court Should Reverse The Infringement Judgment Because DDR Conceded That There Was No Direct Infringement Of Claim 17 Of The '572 Patent By NLG/WTH And There Is No Evidence That NLG/WTH Directed And Controlled Other Parties To Infringe*

The jury’s verdict of direct infringement by NLG/WTH of Claim 17 of the ‘572 Patent was supported by no evidence whatsoever. As the District Court instructed the jury, direct infringement requires that the defendant itself satisfies every element of the claim through its own equipment and actions, or “directed and controlled” other parties to obligate them to provide the missing elements in an infringing matter. (A04658:20-A04659:1); *See Akamai Techs Co. v. Limelight Networks, Inc.*, 692 F.3d 1301, 1307 (Fed.Cir. 2012).

Keller admitted, however, that NLG/WITH does not directly satisfy step (b) of Claim 17, which requires “including within a web page of the first website . . . a link.” (A03678:23-25).

DDR also failed to prove that NLG/WITH exercised “control or direction” over the performance of step (b) of claim 17. *Muniauction*, 532 F.3d 1318, 1330 (Fed.Cir. 2008) (“the control or direction standard is satisfied in situations where the law would traditionally hold the accused direct infringer vicariously liable for the acts committed by another party that are required to complete performance of a claimed method.”). There was no evidence or testimony that NLG/WITH “directs or controls” other parties to provide links on their web pages as required by Claim

17 nor was there any evidence of any contractual relationship that would make NLG/WTH vicariously liable for its partners' actions. *See e.g., Aristocrat Technologies Australia Pty Ltd. v. International Game Technology*, 709 F.3d 1348, 1363 (Fed.Cir. 2013).

The District Court’s reliance on Keller’s testimony and the testimony of NLG/WTH’s expert Gray as support for the jury’s verdict was misplaced. Gray’s testimony that NLG/WTH gives the URL address to the partner and Keller’s testimony that NLG/WTH “gives the – the link – the web – the URL to the partner....” related to the issue of indirect infringement, and whether NLG/WTH “encourages its partners to include . . . links in their webpages.” (A03679:15-23). This testimony did not relate to the “direction or control” of others by NLG/WTH. As the District Court instructed the jury, action is required to *encourage* acts by someone else. (A04660:19-21). “Arms length cooperation,” does not prove “direction or control” in the absence of any evidence that the partners were “specifically obligated” to perform step (b) of the claim “so that every step is attributable to” NLG/WTH as the controlling party. (A04659:2-9) (jury instructions providing that “mere arm’s length cooperation is not enough. Instead, the Defendant must specifically obligate the other party to perform the missing acts . . . in an infringing manner so that every step is attributable to the Defendant as the controlling party.”). More than cooperation is needed for direct infringement.

And, the jury correctly determined that NLG/WTH did not induce infringement of or indirectly infringe Claim 17. (A03079).

Testimony that NLG/WTH gives a URL web address to a partner does not meet DDR's burden of establishing this claim limitation in the accused websites. The Court construed "link" to be "a hypertext, text, banner, logo, graphic, or other element that permits a user to navigate from one web location to another web location by *activating that element*."<sup>28</sup> (A01069) (emphasis added). There was no evidence that a "hypertext, text, banner, logo, graphic or other element" that is activated by the user is a URL web address. (*See e.g.*, A04377:3-A04380:7).

Because DDR conceded that there was no direct infringement of independent Claim 17 of the '572 Patent and failed to prove the exercise of "control or direction" by NLG/WTH over the performance of each step of claim 17, the jury's determination that NLG/WTH infringes this claim is not supported by substantial evidence and should be set aside.

*4) There Is No Evidence That The NLG/WTH Computer Processor Automatically Recognizes Or Identifies The Source Page As Required By Claims 1 and 19 Of The '399 Patent*

DDR did not establish that NLG/WTH's computer processor automatically recognizes or identifies as the source page<sup>29</sup> the one of the first web pages on

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<sup>28</sup> Notably, this was the construction that DDR urged the Court to adopt.

<sup>29</sup> The term "source page" was not defined in the specification.

which the link has been activated, as required by Claims 1 and 19 of the ‘399 Patent. The only testimony about whether this element was met by the accused websites was Keller’s conclusory statement that “when the WTH servers serve the composite webpage, they have to know which website they came from, so it does that.” (A03702:18-A03703:3). The claims, however, do not require the identification of a mere *source* or “website,” as Keller suggests. Instead, the claims require the recognition or identification of a “source page, which is “one of the first web pages on which the link has been activated.” (A00204, 26:48-49, A00205, 28:21-23). This is consistent with the claim construction for the term “web page,” which was construed to be a “document that is accessible through the World Wide Web and capable of being displayed on a web browser.”<sup>30</sup> (A01062). The requirement of a “document” makes clear that the term “source page” refers to the page on which the link has been activated. And, it is consistent with one inventor’s testimony that “what really made [their] . . . invention special was . . . [their] ability to capture the real look and feel.” (A03206:21-23).

According to that inventor, the ability to recognize or identify the “source page” is necessary to “track which hosts drove the – or are responsible for the sales for which merchant kept track of everything.” (A03242:1-5). However, DDR failed to submit any evidence that NLG/WTH was “keeping track of which hosts

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<sup>30</sup> The term “first web page” was construed to be the “host web page.” (A01062).

were . . . providing the link.” (A03323:9-17). The un rebutted testimony established that the NLG/WTH system does *not* know where the user comes from (e.g., the partner’s page), it only knows where the user wants to go (e.g., NLG/WTH’s server). (A04380:17-A04385:3; A04435:8-25). As explained by NLG/WTH’s expert Gray, rather than click a link on the first web page, a visitor can type in NLG/WTH’s URL directly into the search engine, and the information that will be returned will be the same information that would be returned if the visitor activated the link from the first web page. (A04437:4-20). As such, a conclusion that NLG/WTH recognizes or identifies the “source page” is not supported by substantial evidence and should be reversed.

5) *DDR Failed To Prove That NLG/WTH Infringed The Asserted Claims On More Than One Day, And Infringement Could Not Occur Before The ‘399 Patent Issued*

DDR did not even try to establish that NLG/WTH's accused websites infringed for more than specific dates for which Keller presented screen shots from his expert report. (A07626, A07638, A07649, A07659, A07668, A07672, A07677, A07684, A07689). The dates were in May 2012 for five of the websites, and February 2010 and July 2010 for the other websites. (A07626, A07638, A07649, A07659, A07668, A07672, A07677, A07684, A07689). Nothing prevented DDR from offering evidence of alleged infringement on other dates; it simply failed to do so.



The District Court relied on Keller's alleged consideration of "the systems as a whole," and "deposition transcripts where the people who work for Defendants describe how their systems operated." (A00021). Other than Keller's conclusory testimony, there was no evidence in the record about how NLG/WTH's systems operated.<sup>31</sup> In addition, Keller's testimony about looking at "past websites" did not relate to each accused website, but was limited to the websites of Alaska Airlines, Hotwire, TravelNow, and American Airlines, where DDR withdrew allegations of infringement for any use after February 2010 and July 2010 (for American Airlines). (A03581:11-24, A07668, A07672, A07684, A07689). Indeed, DDR's withdrawal of its allegations for American and Alaska Airlines post 2010 demonstrates that any reliance on the "basic functionality" being "unchanged" and the "source code . . . had not changed in any substantial way" is also misplaced. (A00021). If websites that operated on the same platform were not infringing, then DDR cannot meet its burden of proof by relying on such functionality.

Further, there could be no infringement of the '399 Patent by the Alaska Airlines, American Airlines, TravelNow and Hotwire websites, because the infringing activity took place before the patent ever issued. As acknowledged by Keller, his "check marks" down the line on a demonstrative showing infringement

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<sup>31</sup> It is unclear what deposition testimony Keller relied upon as NLG/WTH's witnesses did not describe how their systems operated in the context of meeting the elements of the Asserted Claims.

of the ‘399 Patent by all the accused websites “appears to be an error.” (A03720:23-A03723:2).

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DDR did not introduce substantial evidence of all claim elements present in NLG/WTH's accused websites. *See Mirror Worlds*, 692 F.3d at 1362. Accordingly, the Court should hold that DDR did not prove that NLG/WTH infringed the Asserted Claims, and the jury's verdict should be set aside.

## F. The Jury's Damages Verdict Was Not Supported By Substantial Evidence And Should Have Been Set Aside

The jury awarded \$750,000 in damages for NLG/WTH's alleged infringement. (A03080). DDR claimed a 5.5% running royalty rate on NLG/WTH's total sales revenue for the Accused Websites. (A03806:21-24, A03809:16-23, A08070). NLG/WTH countered with a lump-sum payment theory which would have resulted in a one-time payment of \$375,000. (A04471:4-18). Although DDR contended that a running royalty applied, its proposed Verdict Form and the Final Verdict Form did not request the jury to determine the running royalty rate or the revenue base. (A02222, A03080).

To the extent that the jury’s award is based on a lump-sum, then that award should be the “entire agreed-upon amount for the licensed technology,” for both

the past and future because DDR disclaimed damages after April 2012.<sup>32</sup> See *Lucent Tech., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1325-26 (Fed.Cir. 2009) (recognizing that a lump-sum is an “upfront, paid-in-full royalty.”).

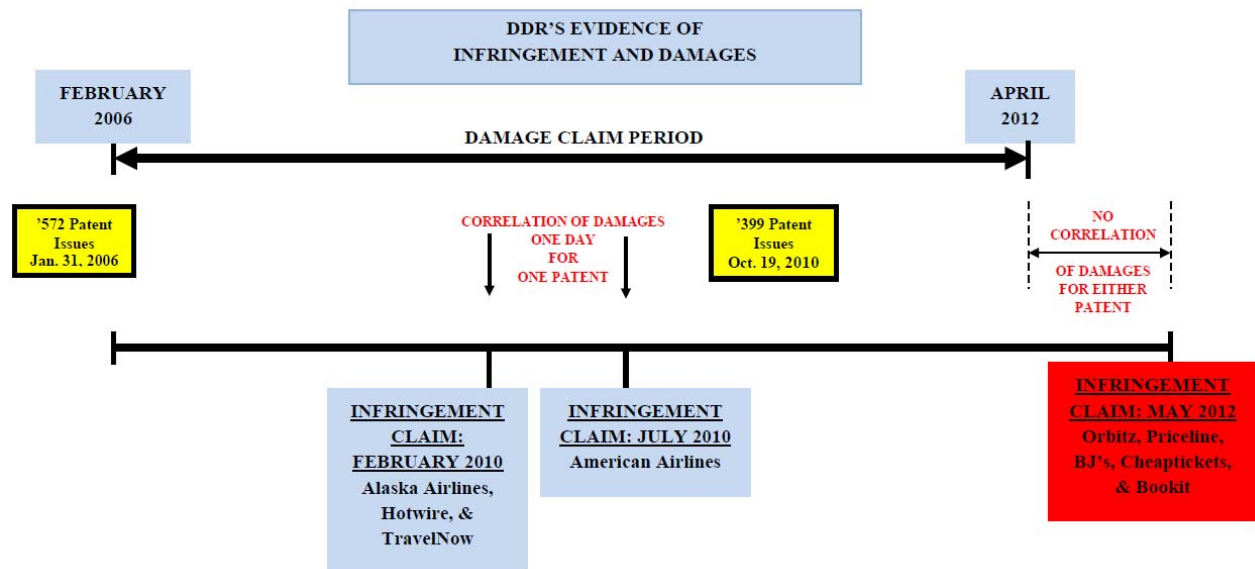
To the extent the jury's award is based on a running royalty, this award cannot be supported by "substantial evidence" when 1) DDR failed to correlate its infringement claims to DDR's proffered proof on damages, and 2) DDR's expert, Chandler, could not state any basis for a 5.5% reasonable royalty rate, which was improperly applied to the entire market value of NLG/WTH's revenue. The District Court erred in failing to grant NLG/WTH's JMOL motion to set aside or reduce the damages award.

*1) DDR Failed To Tie Its Claim For Damages To The Relevant Infringement By Each Accused Website*

DDR did not meet its burden of establishing the amount of damages for patent infringement because it failed to correlate the infringement claims to its proffered proof on damages, that is, DDR showed alleged infringement on one set of dates and alleged damages for another set of dates. *See e.g., Applied Medical Resources Corp. v. U.S. Surgical Corp.*, 435 F.3d 1356, 1363 (Fed.Cir. 2006) (“[R]easonable royalty damages [must be] tied to the infringement being

<sup>32</sup> The Jury Instructions stated that “[a] lump sum royalty is a royalty payment where the patent owner receives a single, up-front payment.” (A04680:25-A04681:24). The jurors were instructed that they could “award a fully-paid, lump-sum royalty for the time period of infringement.” (*Id.*).

compensated for.”). DDR did not make any claim for damages after April 2012 for the accused websites. (A03770:1-6, A03811:6-8, A08070). Moreover, DDR did not try to prove that NLG/WTH’s accused websites infringed for more than one specific date for which Keller presented screen shots to the jury. For Orbitz, Priceline, BJs, Cheaptickets and Bookit, the only evidence of infringement that Keller provided was in **May 2012**, the month after the damages cut-off. (A05912-A05913, A07626, A05932-A05933, A07638, A05946-A05947, A07649, A05959-A05961, A07659-A07663, A05967-A05970, A07677-A07681). With respect to the remaining websites, namely, American Airlines, Alaska Airlines, Hotwire and TravelNow, DDR only presented evidence of infringement that occurred in 2010 (which was before the ‘399 Patent even issued). (A05963-A05964, A07667-A07669, A05965-A05966, A07672-A07674, A05971-A05972, A07684-A07686, A05973-A05974, A07689-A07692). The chart below summarizes the dates of DDR’s damages proof and infringement proof for each of the Accused Websites:



If the Court determines that “substantial evidence” supports the infringement verdict for the ‘572 Patent and it is not invalid, which NLG/WTH disputes, then DDR would be entitled to damages only for two days 2010, the only time when DDR demonstrated any infringement and only for the American Airlines, Alaska Airlines, Hotwire and TravelNow websites. The jury’s damages award of \$750,000 based on the revenues for those websites even for the entire year 2010 represents a royalty rate of about 27% of all sales revenue, or 97% of online sales revenue.<sup>33</sup> (A08070-A08071). The amount is grossly excessive and nearly 5 or 18 times greater, respectively, than the speculative 5.5% rate proposed by DDR. *Id.* Accordingly, the jury’s damages award should have been set aside. *See*

<sup>33</sup> Despite the District Court’s acknowledgement that “revenue attributed to Phone-only sales is not relevant” DDR improperly based its request for damages on all NLG/WTH revenue, including revenue generated by phone transactions which it admitted do not infringe the patents-in-suit. (A08828, pg. 2).

*Laserdynamics v. Quanta Computer, Inc.*, 694 F.3d 51, 60 (Fed.Cir. 2012); *Mirror Worlds, LLC v. Apple, Inc.*, 784 F.Supp.2d 703, 723 (E.D.Tex. 2011).

*2) There Was No Basis for The 5.5% Royalty Rate And It Should Not Have Been Applied To The Entire Market Value of NLG/WTH's Revenue*

DDR failed to provide the jury with sufficient evidence and analysis to support an award of damages where Chandler's testimony was fatally flawed both in how he arrived at the 5.5% royalty rate and in how he calculated the revenue base.

Chandler could not state a reliable basis for the 5.5% royalty rate applied to NLG/WTH's allegedly infringing sales.<sup>34</sup> He derived the rate from a starting range of 0% to 10.5%, but had no sound basis for this starting point. (A03795:14-18). By using "half" of the variable profit margin as a "starting point," Chandler arbitrarily applied the rejected "25% rule." *Whitserve, LLC v. Computer Packages, Inc.*, 694 F.3d 10, 29-30 (Fed.Cir. 2012); *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1318 (Fed.Cir. 2011) (25% rule has no relation to the facts of the case and is arbitrary, unreliable and irrelevant).

Moreover, in determining the royalty base, Chandler used the entire market value (revenue) of NLG/WTH's accused programs, but failed to show that the

<sup>34</sup> In the initial version of his expert report, Chandler used a 4.5% royalty rate. This demonstrates the arbitrary nature of DDR's proposed rate.

allegedly patented features provide the basis for customer demand or to properly consider NLG/WTH's significant contributions unrelated to the patents-in-suit, such as, brand name recognition, technological investments, product inventory, relationships with cruise providers, call centers, low price deals, etc.<sup>35</sup> (A04497:12-A04498:6, A04511:21-A04512:19); *Lucent Tech.* at 1336; *Laserdynamics*, 694 F.3d at 66-68. There was no testimony or evidence to establish which infringing sales resulted from using the patents-in-suit. Chandler provided no rational basis for including NLG/WTH's telephone sales in the royalty base in the absence of evidence showing that any phone sales resulted from a customer activating any links on a partner web page. Indeed, the evidence demonstrated that customers may reach NLG/WTH's services in many ways other than by activating links on partner web pages, such as (1) clicking a link in an email or (2) finding NLG/WTH's website directly through a web browser search or (3) calling a number in an advertisement. (A03457:24-A03458:6).

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Because DDR failed to prove damages with substantial evidence and reasonable certainty, the Court should set aside or reduce the jury's excessive damages award.

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<sup>35</sup> DDR's damages claim also improperly includes damages for infringement of the '399 Patent relating to websites for which DDR has asserted infringement only before the '399 Patent issued. (A03722:13-18).

*3) The District Court Abused Its Discretion In Awarding Pre-Judgment Interest From 2006*

The District Court abused its discretion by awarding prejudgment interest from 2006. (A00036-A00041). DDR should not be rewarded with additional compensation where it is a non-practicing entity which has not and does not run a competing business or make any products. It simply uses the patents-in-suit to collect licensing fees.

DDR also should not be awarded prejudgment interest when it unduly delayed the case for over four years (from 9-22-06 through 10-3-10) by seeking reexamination of the '572 Patent and filing an opposed motion for stay of the District Court action. This delay caused prejudice to NLG/WTH because it expanded the length of time over which prejudgment interest might be calculated. *See Crystal Semiconductor Corp. v. TriTech Microelectronics Intern., Inc.*, 246 F.3d 1336, 1362 (Fed.Cir. 2002). NLG/WTH should not have to pay for this period of delay by DDR, which formed the bulk of the prejudgment interest that it obtained. *See Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 939 F.2d 1540, 1546 (Fed.Cir. 1991) (affirming denial of prejudgment interest for period during which proceedings were stayed at the patentee's request). If the Court determines that prejudgment interest was warranted, the interest should be computed not from 2006, but from 2010, as a result of the District Court Order issuing the stay and DDR's undue delay and to conform to the evidence of alleged infringement



submitted by DDR. Accordingly, the Court should set aside the District Court's award of prejudgment interest.

## VIII. CONCLUSION

For all of the foregoing reasons, the District Court's judgment should be reversed.

Respectfully submitted,

COOPER & DUNHAM LLP

Dated: October 9, 2013

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**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

**DDR HOLDINGS, LLC**

*Plaintiff and Counterdefendant,*

V.

**HOTELS.COM, L.P., et al.**

*Defendants and Counterclaimants.*

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§ CIVIL ACTION NO. 2:06-cv-42-JRG  
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## JUDGMENT

A jury trial commenced on October 8, 2012. The jury returned a unanimous verdict on October 12, 2012. Pursuant to Rule 58 of the Federal Rules of Civil Procedure and in accordance with the jury's verdict, the Court hereby renders the following Judgment:

1. The jury having determined that Defendant Digital River, Inc. (“Digital River”) infringed claims 13, 17, and 20 of U.S. Patent No. 6,993,572 (“the ’572 Patent”); and the jury having determined that those same claims of the ’572 Patent are not invalid; and the jury having awarded damages of \$750,000.00 to DDR for Digital River’s infringement through October 12, 2012; it is **ORDERED** that DDR have and recover from Digital River the sum of Seven Hundred and Fifty Thousand Dollars (\$750,000.00) as compensatory damages for infringement through October 12, 2012 in this case;
2. The jury having determined that Defendants National Leisure Group, Inc. and World Travel Holdings, Inc. (“NLG/WTH”) infringed Claims 13, 17, and 20 of the ’572 Patent and Claims 1, 3, and 19 of U.S. Patent No. 7,818,399 (“The ’399 Patent”); and the jury having determined that those same claims of the ’572 Patent are not invalid; and

the jury having awarded damages of \$750,000.00 to DDR for NLG/WITH's infringement through October 12, 2012; it is **ORDERED** that DDR have and recover from NLG/WITH the sum of Seven Hundred and Fifty Thousand Dollars (\$750,000.00) as compensatory damages for infringement through October 12, 2012 in this case;


3. Pursuant to 35 U.S.C. § 284, the Court awards DDR an additional Two Hundred Eighty-One Thousand, Four Hundred and Four Dollars (\$281,404.00) in pre-judgment interest from Digital River, based upon the average prime interest rate of 4.83% as calculated and applying from the date the damages for infringement should have been paid, January 31, 2006, through October 31, 2012, compounded annually. Accordingly, the total damages awarded to DDR from Digital River is One Million, Thirty-One Thousand, Four Hundred and Four Dollars (\$1,031,404.00), plus an additional amount at the per diem rate of One Hundred Thirty-One Dollars and Seventy-One Cents (\$131.71) per day beginning on November 1, 2012, through the entry of this Judgment.
4. Pursuant to 35 U.S.C. § 284, the Court awards DDR an additional Two Hundred Eighty-One Thousand, Four Hundred and Four Dollars (\$281,404.00) in pre-judgment interest from NLG/WTH, based upon the average prime interest rate of 4.83% as calculated and applying from the date the damages for infringement should have been paid, January 31, 2006 through October 31, 2012, compounded annually. Accordingly, the total damages awarded to DDR from NLG/WTH is One Million, Thirty-One Thousand, Four Hundred and Four Dollars (\$1,031,404.00), plus an additional amount at the per diem rate of One Hundred Thirty-One Dollars and

Seventy-One Cents (\$131.71) per day beginning on November 1, 2012, through the entry of this Judgment.

5. Pursuant to Rule 54(d) of the Federal Rules of Civil Procedure and 28 U.S.C. § 1920, the Court finds that DDR is the prevailing party in this matter and is entitled to costs consistent therewith.
6. Pursuant to 28 U.S.C. § 1961, the Court awards DDR post-judgment interest applicable to all sums awarded herein, at the statutory rate, from the entry of this Judgment until paid.

**So Ordered and Signed on this**

**Jun 20, 2013**

  
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RODNEY GILSTRAP  
UNITED STATES DISTRICT JUDGE

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

**DDR HOLDINGS, LLC**

*Plaintiff and Counterdefendant,*

v.

**HOTELS.COM, L.P., et al.**

*Defendants and Counterclaimants.*

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CIVIL ACTION NO. 2:06-cv-42-JRG

**MEMORANDUM OPINION AND ORDER**

Before the Court are the parties’ post-trial motions. Having considered the parties’ written submissions, the Court: (1) **DENIES** Defendant Digital River, Inc.’s Renewed Motion for Judgment as a Matter of Law Pursuant to Fed. R. Civ. P. 50(b) (Dkt. No. 540); (2) **DENIES** National Leisure Group, Inc.’s and World Travel Holdings, Inc.’s Renewed Motion for Judgment as a Matter of Law Pursuant to Fed. R. Civ. P. 50(b) (Dkt. No. 539); and (3) **DENIES** Defendant Digital River, Inc.’s Motion for New Trial Pursuant to Fed. R. Civ. P. 59 (Dkt. No. 562).

**I. BACKGROUND**

DDR Holdings, LLC (“DDR”) filed this patent infringement action against multiple defendants on January 31, 2006, alleging infringement of U.S. Patent Nos. 6,629,135 (“the ’135 patent”) and 6,993,572 (“the ’572 patent”). The case was then stayed for almost four years until October 6, 2010, pending the reexamination proceedings at to both of the patents-in-suit. On September 9, 2011, DDR amended its complaint to add additional infringement allegations of U.S. Patent No. 7,818,399 (“the ’399 patent”). This case went to trial on October 8, 2012 against Digital River, Inc. (“Digital River”), National Leisure Group, Inc., and world Travel Holdings, Inc. (collectively, “NLG”). Following a five day trial, the jury returned a unanimous verdict finding

that Digital River infringed claims 13, 17, and 20 of the '572 patent and awarded damages to DDR of \$750,000 for the period of the issue date of the patent, January 31, 2006, through the verdict date, October 12, 2012. The jury also found that NLG infringed claims 13, 17, and 20 of the '572 patent and claims 1, 3, and 9 of the '399 patent and awarded damages to DDR of \$750,000 for the period of the earliest issue date, January 31, 2006, through the verdict date. The jury did not find either infringement to be willful. The jury further found that claims 13, 17, and 20 of the '572 patent was not invalid.

## II. APPLICABLE LAW REGARDING RULE 50

Judgment as a matter of law is only appropriate when “a reasonable jury would not have a legally sufficient evidentiary basis to find for the party on that issue.” Fed. R. Civ. P. 50(a). “The grant or denial of a motion for judgment as a matter of law is a procedural issue not unique to patent law, reviewed under the law of the regional circuit in which the appeal from the district court would usually lie.” *Finisar Corp. v. DirectTV Group, Inc.*, 523 F.3d 1323, 1332 (Fed. Cir. 2008). The Fifth Circuit “uses the same standard to review the verdict that the district court used in first passing on the motion.” *Hiltgen v. Sumrall*, 47 F.3d 695, 699 (5th Cir. 1995). Thus, a jury verdict must be upheld, and judgment as a matter of law may not be granted, unless “there is no legally sufficient evidentiary basis for a reasonable jury to find as the jury did.” *Id.* at 700. The jury’s verdict must be supported by “substantial evidence” in support of each element of the claims. *Am. Home Assurance Co. v. United Space Alliance*, 378 F.3d 482, 487 (5th Cir. 2004).

A court reviews all evidence in the record and must draw all reasonable inferences in favor of the nonmoving party; however, a court may not make credibility determinations or weigh the evidence, as those are solely functions of the jury. *See Reeves v. Sanderson Plumbing Prods., Inc.*,

530 U.S. 133, 150-51 (2000). The moving party is entitled to judgment as a matter of law “only if the evidence points so strongly and so overwhelmingly in favor of the nonmoving party that no reasonable juror could return a contrary verdict.” *Int’l Ins. Co. v. RSR Corp.*, 426 F.3d 281, 296 (5th Cir. 2005).

### **III. APPLICABLE LAW REGARDING RULE 59**

Under Rule 59(a) of the Federal Rules of Civil Procedure, a new trial can be granted to any party to a jury trial on any or all issues “for any reason for which a new trial has heretofore been granted in an action at law in federal court.” Fed. R. Civ. P. 59(a). “A new trial may be granted, for example, if the district court finds the verdict is against the weight of the evidence, the damages awarded are excessive, the trial was unfair, or prejudicial error was committed in its course.” *Smith v. Transworld Drilling Co.*, 773 F.2d 610, 612-13 (5th Cir. 1985). The Court must view the evidence “in a light most favorable to the jury’s verdict, and [] the verdict must be affirmed unless the evidence points so strongly and overwhelmingly in favor of one party that the court believes that reasonable persons could not arrive at a contrary conclusion.” *Dawson v. Wal-Mart Stores, Inc.*, 978 F.2d 205, 208 (5th Cir. 1992).

### **IV. DIGITAL RIVER’S RENEWED MOTION FOR JUDGMENT AS A MATTER OF LAW PURSUANT TO FED. R. CIV. P. 50(B) (DKT. NO. 540)**

Digital River seeks judgment as a matter of law pursuant to Fed. R. Civ. P. 50(b) that (1) the asserted claims are invalid under 35 U.S.C. § 112 as indefinite; (2) the asserted claims are invalid under 35 U.S.C. §§ 102 and 103 as anticipated and/or obvious; (3) the asserted claims are invalid under 35 U.S.C. § 101 as directed to subject matter that is not eligible for patent protection; (4) Digital River does not directly infringe the asserted claims; and (5) DDR did not prove that it is entitled to any damages.



**A. The asserted claims are not invalid under 35 U.S.C. § 112 as indefinite**

Digital River contends that it is entitled to judgment as a matter of law that the asserted claims are invalid as indefinite because the patent specification lacks the required objective guidance to allow one of ordinary skill in the art to know when the claimed “look and feel” element has been achieved. (Dkt. No. 540, at 2.) As support, Digital River relies on *Datamize, LLC v. Plumtree Software, Inc.* where the Federal Circuit found the term “aesthetically pleasing” to be indefinite because the patentee “offered no objective definition identifying a standard for determining when an interface screen is aesthetically pleasing.” 417 F.3d 1342, 1350 (Fed. Cir. 2005). However, this Court does not find “aesthetically pleasing” to be analogous to the concept of “look and feel” in this case.

35 U.S.C. § 112 ¶ 2 requires claims to particularly point out and distinctly claim the subject matter which the applicant regards as his invention. The purpose of the definiteness requirement is to ensure that the claims delineate the scope of the invention using language that adequately notifies the public of the patentee’s right to exclude. *Honeywell Int’l Inc. v. Int’l Trade Comm’n*, 341 F.3d 1332, 1338 (Fed. Cir. 2003). A claim is indefinite when it depends “solely on the unrestrained, subjective opinion of a particular individual purportedly practicing the invention.” *Datamize*, 417 F.3d at 1350. However, “[i]f the meaning of the claim is discernible, even though the task may be formidable and the conclusion may be one over which reasonable persons will disagree, we have held the claim sufficiently clear to avoid invalidity on indefiniteness grounds.” *Exxon Research & Eng’g Co. v. United States*, 265 F.3d 1371, 1375 (Fed. Cir. 2001). Whether a patent claim fails for indefiniteness is a question of law for the Court to decide. *Id.* at 1376.

This Court previously defined “look and feel” to be “a set of elements related to visual appearance and user interface conveying an overall appearance identifying a website; such elements include logos, colors, page layout, navigation systems, frames ‘mouse-over’ effects, or others [*sic*] elements consistent through some or all of the website.” (Dkt. No. 309 at 10.) The claims define the question of whether the “look and feel” of the web pages that Digital River serves are “based on” the look and feel of the referring host site. A comparison of visual elements according to the Court’s construction between a pair of websites is precisely the type of infringement question for the trier of fact to decide. Such a comparison does not render the jury’s decision subjective. Indeed, claims need not have mathematically precise boundaries so long as the patent gives examples and general guidelines. *See Enzo Biochem, Inc. v. Applera Corp.*, 599 F.3d 1325, 1335 (Fed. Cir. 2010) (the term “not interfering substantially” does not render claims indefinite); *Ecolab, Inc. v. Envirochem, Inc.*, 264 F.3d 1358, 1367 (Fed. Cir. 2001) (terms like “about” and “substantially” are descriptive terms commonly used in patent claims to “avoid a strict numerical boundary to the specified parameter.”).

A finding of indefiniteness must overcome the statutory presumption of validity. *See* 35 U.S.C. § 282. That is, the “standard [for finding indefiniteness] is met where an accused infringer shows by clear and convincing evidence that a skilled artisan could not discern the boundaries of the claim based on the claim language, the specification, and the prosecution history, as well as her knowledge of the relevant art area.” *Halliburton Energy Servs., Inc. v. M-I LLC*, 514 F.3d 1244, 1249-50 (Fed. Cir. 2008). The Court does not find that Digital River has met its burden. Accordingly, judgment as a matter of law as to a finding of indefiniteness is denied.

**B. The asserted claims are not invalid as anticipated and/or obvious**

Digital River contends it has shown by clear and convincing evidence, through the testimony of Mr. Pichler and Mr. Kent, that the asserted claims are invalid. Digital River argues that the claims are invalid as anticipated by the Digital River Secure Sales System (“SSS System”), and also invalid as obvious in light of the SSS System, and/or in light of the combination of the SSS System with U.S. Patent No. 6,141,666 (the “Tobin patent”). Digital River argues that since three of the exemplary “look and feel elements” from the Court’s claim construction were included in its prior art system, substantial evidence contradicts the jury’s conclusion that the “look and feel” limitation is not met. (Dkt. No. 557 at 5.) The Court disagrees.

As stated earlier, the Court construed “look and feel” to mean

“[a] set of elements related to visual appearance and user interface conveying an overall appearance identifying a website; such elements include logos, colors, page layout, navigation systems, frames, ‘mouse-over’ effects, or others [*sic*] elements consistent through some or all of the website.”

(Dkt. No. 309 at 10.) While Digital River is correct that the list of elements in the Court’s construction is exemplary and not exclusive, this term is not necessarily satisfied by matching one, three, or a specific number of the exemplary elements. Rather, it is up to the trier of fact to determine whether the combination of elements making up the overall appearance of a website has a similar “look and feel” as compared to another website.

Indeed, the trial record reveals that the jury heard from Digital River’s witnesses about how the SSS System operated and what capabilities it had, and the jury has weighed the credibility of such evidence. The trial record shows that Digital River’s Vice President of Product and Innovation, Mr. Gagliardi, testified that earlier Digital River systems (1) had “much more limited functionality” than the recent, infringing systems, (2) had “technical constraints” that made it

“difficult to emulate” sites, (3) relied on “rigid predefinition of templates,” (4) “only had a logo” match, and (5) required a logo to appear at a fixed location absent a “hack” to change location. (10/8/2012 PM Tr. at 221:10-224:15; 10/10/12 PM Tr. at 161:11-165:2.) DDR’s expert witness, Dr. Keller, also offered his opinion that the SSS System and related publications failed to show any “overall match” of appearance because the pair of websites Digital River presented “basically had a matching logo,” which falls short of being “based on” the host’s “look and feel.” (10/11/2012 PM Tr. at 103:2-112:19.) The jury considered such evidence, including the pairs of websites that Digital River displayed, and evidently found no corresponding overall look and feel to render the ’572 patent invalid in light of the SSS system.

Turning to the issue of obviousness, there is substantial evidence in the record that that claim 20 of the ’572 patent is not obvious in view of the SSS System and/or in light of the combination of the SSS System and the Tobin patent. DDR’s expert provided the following testimony that the jury was entitled to consider in rendering their verdict:

Q. And when we’re talking about obviousness, is it sufficient to put a reference in front of each of the elements, or do you have to show something more?

A. You have to show something more.

Q. What is that something more?

A. It’s called a motivation to combine, to combine those references, to put them together.

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Q. Okay. Dr. Keller, you looked at Mr. Kent’s report with respect to this combination, didn’t you?

A. Yes, I did.

Q. Did he say -- in the report, did he say why someone would be motivated to combine these two references?

A. No, he did not.

Q. And in his testimony before the jury today, did he give -- did he tell the jury what the motivation was to combine the two references?

A. No, he did not.

(10/11/2012 PM Tr. at 121:9-122:8.) In other words, Digital River did not meet their burden to show obviousness by clear and convincing evidence. For these reasons, the Court finds that substantial evidence supports the jury's verdict that the asserted claims are not invalid as anticipated or obvious in light of the SSS System and/or in light of the combination of the SSS System and the Tobin patent.

**C. Judgment as a matter of law of invalidity for failing to claim patent-eligible subject matter**

Digital River contends that the asserted claims are invalid as unpatentable subject matter under 35 U.S.C. § 101 because they are directed to an abstract idea. (Dkt. No. 540 at 13.) In its opposition, DDR incorporates by reference its opposition to a similar argument made by defendant NLG. (Dkt. No. 552 at 7.) In reply, Digital River also incorporates by reference its responsive arguments in NLG's reply to DDR's Opposition. (Dkt. No. 557 at 6.) To similarly avoid repetition, the Court addresses this common issue in Section V(B), below.

**D. Judgment as a matter of law of no infringement of the asserted claims**

Digital River contends that it is entitled to judgment as a matter of law of no infringement because no reasonable jury could find that Digital River directly infringed based on three grounds: (1) the asserted claims require three separate entities, (2) DDR failed to perform the required element-by-element infringement analysis, and (3) substantial evidence does not support the jury's direct infringement verdict because Digital River does not store the "look and feel," as required by the asserted claims. (Dkt. No. 540 at 15-16.)

*i. The '572 patent covers two-party systems*

Digital River seeks a judgment of no infringement as a matter of law based on the same arguments presented in its motion for summary judgment, which was previously denied by the

Court. (*See* Dkt. No. 500.) Digital River argues error in the Court’s conclusion that the asserted claims can encompass two-party systems because it was based on a single statement in the specification. Digital River urges that “by allowing that one statement to override the remainder of the prosecution history, the Court committed legal error because even a statement in a patent can be disclaimed.” (Dkt. No. 558 at 7.) Digital River asserts that during prosecution, DDR clearly and unmistakably disclaimed two-party systems by distinguishing its invention from certain prior art two-party systems. (*Id.* at 8.) In its opposition, DDR responds that Digital River merely repeats its previously rejected arguments without specifying why there is some mistake within the Court’s prior ruling.

On review, the Court does not find error with its previous ruling. Contrary to Digital River’s assertion that the Court allowed one statement in the specification to override the entire prosecution history, the Court specifically considered each prosecution history disclaimer argument that Digital River presented. In the Memorandum and Opinion denying Digital River’s Motion For Summary Judgment (after considering the parties’ written submissions, hearing oral argument, and a thorough review of the full reexamination file of the ’572 patent), the Court held there was no clear disavowal of claim scope. (Dkt. No. 500 at 9.) The Court underscored the importance of context in considering the isolated statements cited by Digital River, and specifically found that “[w]hen viewed as a whole, the reexamination file shows that there is no clear and unambiguous disavowal of claim scope that would preclude the two-party embodiment expressly disclosed in the specification.” (*Id.* at 8-9.) The Court does not reach a different conclusion when presented with the same (but simply rehashed) arguments post-trial.

For the foregoing reasons, the Court does not find legal error with its prior summary judgment ruling. Accordingly, the Court reaffirms that, as a matter of law, a party may infringe the '572 patent with a two-party system.

ii. *Substantial evidence supports finding of direct infringement of AutoDesk, Adobe and VMware*

Digital River contends that it is entitled to judgment as a matter of law of no infringement because DDR's infringement expert, Dr. Keller, did not compare each element of the asserted claims with each of the accused systems. Digital River argues that Dr. Keller failed to demonstrate at trial that the AutoDesk, Adobe and VMware websites encompass each element of each asserted claim. (Dkt. No. 540 at 23.)

In its opposition, DDR responds that the jury heard substantial evidence of direct infringement of the overall visual appearance elements of the asserted claims. For example, the jury observed images of the three customers' websites and a list of "visual similarities" between the website pairs, in addition to Dr. Keller's testimony that the hosted sites infringed. (Dkt. No. 552, at 8.) DDR also responds that the jury heard substantial evidence of direct infringement by AutoDesk, Adobe and VMware as to all of the other elements of the asserted claims. DDR submits that during trial, Dr. Keller testified that Digital River accomplished six different infringements (including the three challenged ones) on the same platform called the "Global Commerce System." (*Id.* at 9.) DDR also submits that Dr. Keller testified that the "Global Commerce System" directly infringes the '572 patent by using one of the six infringements as an example for purposes of stepping through the remaining claim elements. (*Id.*) Therefore, DDR argues that this testimony also applies to the other five infringements that use this platform. The Court agrees.

The trial record reflects that DDR presented substantial evidence to support a jury verdict that the AutoDesk, Adobe and VMware websites met each element of the asserted claims. Dr. Keller testified that Digital River accomplished six different infringements via six customers, including the three challenged ones, on the same platform known as the “Global Commerce System.” (10/9/2012 AM Tr. at 82:18-86:22.) Dr. Keller walked through, on an element-by-element basis, how the “Global Commerce System” infringed claims 13, 17, and 20 of the ’572 patent as to Trend Micro, one of the six Digital River customers. (*Id.* at 88:9-98:15 and 125:24-139:5.) Then, Dr. Keller discussed infringement of the Nuance store, another one of the six Digital River customers, and explained the differences between Global Commerce’s operation of the Nuance Store from the Trend Micro store:

Q. Does Digital River’s operation of Global Commerce to provide the Nuance store differ in any way from the -- its operation of the Trend Micro store on the Global Commerce Platform?

A. Just a few ways.

First of all, we’re displaying -- Digital River is displaying Nuance’s products rather than Trend Micro’s products, and it’s using the look and feel of Nuance’s website as opposed to Digital River’s -- sorry -- as opposed to Trend Micro’s website.

Q. So outside of the differences with respect to the particular look-and-feel match and the particular commerce content, did you identify any other differences between the operation of the Global Commerce platform for Nuance site and for Trend Micro site?

A. No.

(10/9/2012 AM Tr. at 139:7-22.) Dr. Keller continued in his testimony by comparing the look and feel of each website pair and listing visual similarities between them for the Nuance store (*Id.* at 139:22-145:3), Microsoft store (*Id.* at 145:6-148:8), AutoDesk (*Id.* at 148:10-149:19), Adobe (*Id.* at 149:20-151:5), and VMware (*Id.* at 151:13-153:7.)

The Court finds that Dr. Keller’s testimony of how the Global Commerce platform running the Trend Micro store infringes the asserted claims, taken as a whole with the visual comparison of



each of the six customer websites, supports a jury finding that each customer website running on the Global Commerce platform infringes in a similar manner. In addition, the exhibits of product pages for each customer's host website and Dr. Keller's comparison to the each customer's outsourced store page served by Digital River's Global Commerce platform constitutes substantial evidence to support the jury's verdict of direct infringement by AutoDesk, Adobe and VMware.<sup>1</sup>

iii. *Substantial evidence supports a finding that Digital River directs and/or controls Akamai servers*

Digital River contends there is no substantial evidence in the record that it stores the "look and feel" information as required by the asserted claims because the servers are neither owned nor operated by Digital River. (Dkt. No. 540 at 24.) Digital River asserts that trial testimony showed that it entered into an arms-length contract with Akamai to provide the servers, and such arms-length cooperation is insufficient to support a finding of direct infringement. (*Id.* at 25.)

In response, DDR first argues that Digital River waived this defense by failing to disclose it in advance of trial, pursuant to Fed. R. Civ. P. 37(c)(1), which states: "If a party fails to provide information . . . as required by Rule 26(a) or (e) . . . , the party is not allowed to use that information . . . to supply evidence on a motion, at a hearing, or at trial, unless the failure was substantially justified or is harmless." However, Rule 26(a)(3)(A) provides that "a party must provide . . . the evidence it may present at trial *other than solely for impeachment* . . . ." (emphasis added). Digital River replies that its attack on DDR's infringement case is based on Dr. Keller's revelation during cross-examination that he did not investigate the location or owner of the servers that he alleged were involved in infringement, and is thus not waived. (10/9/2012 PM Tr. at 55:21-57:7.) As DDR

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<sup>1</sup> The Court notes that Digital River does not contend judgment as a matter of law of no direct infringement for its other customer websites (e.g. the Microsoft store), even though Dr. Keller did not specifically walk through the Global Commerce platform as to its operation of each website.

has provided no case law compelling the Court to find waiver in such a situation where the rules do not preclude impeachment evidence, the Court does not find waiver occurred.

DDR next argues that notwithstanding its allegations of waiver, there is substantial evidence to support the jury's verdict of infringement. DDR contends that the jury is entitled to make the reasonable inference that (1) Akamai is Digital River's agent, (2) Akamai serves a duplicated image of Digital River data, and (3) Digital River directs and controls Akamai's activities. (Dkt. No. 552 at 11.) To "use" a system for purposes of infringement, "a party must put the invention into service, i.e., control the system as a whole and obtain benefit from it . . . ." *Centillion Data Sys., LLC v. Qwest Commc'ns Int'l, Inc.*, 631 F.3d 1279, 1284 (Fed. Cir. 2011). The "control" contemplated does not have to be physical or direct control; rather, it is the ability to place the system as a whole into service. *Id.* During trial, the jury heard testimony from Mr. Gagliardi that Digital River had a contract with Akamai to serve data from domains "c5.img.digitalriver.com" and "drh.img.digitalriver.com." (10/10/2012 PM Tr. at 155:4-156:4.) The jury also heard expert testimony from Dr. Keller that Akamai acts on behalf of Digital River by caching copies of Digital River content for faster access:

Q. So -- and what does Akamai -- what is Akamai's business? What do they do?

A. They bring somebody else's content closer to you. So in this particular case, if Digital River contracts with Akamai to push their content closer to you, they're actually pushing Akamai -- they're actually pushing Digital River's content and sort of making a copy of it closer to you so you can get it quicker, but essentially doing it on behalf of Digital River and acting as -- so -- acting as a -- operating on behalf of Digital River, so it's essentially Digital River's content that came from Digital River's server.

Q. So it would be a copy of what's on Digital River's own server, correct?

A. That's correct. It's a copy. It's simply copied closer to make it quicker to download.

(10/9/2012 PM Tr. at 86:20-87:10.) Therefore, although Akamai owned and operated servers storing the “look and feel” information on behalf of Digital River, the Court finds that there exists substantial evidence in the record to allow a reasonable inference by the jury that the servers were under the direction and control of Digital River.

**E. Judgment as a matter of law that DDR’s damages model is unsupportable**

Digital River contends that no reasonable jury could find that DDR was entitled to recover \$750,000 in damages from Digital River because DDR provided no evidence at trial that ties the value of sales transactions to infringement. (Dkt. No. 557 at 10.) The patentee bears the burden of proving damages, which includes the burden to “sufficiently [tie the expert testimony on damages] to the facts of the case.” *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1315 (Fed. Cir. 2011). Digital River argues that product sales were not properly tied to DDR’s damages model because any such sales occurred only after the alleged infringement transpired. (Dkt. No. 557 at 10.) In its opposition, DDR responds that its damages expert, Dr. Chandler, presented substantial evidence tying his damages theory to the accused use of the invention, and that the fact that sales occur immediately after, not during, infringement is immaterial. (Dkt. No. 560 at 7.) The Court agrees with DDR.

The record reflects that Dr. Chandler explained how his damages method determines a value based on the economic benefits derived from the patented product or service. (10/9/2012 PM Tr. at 124:7-126:17; 144:4-5; 176:21-23) For example, Dr. Chandler testified:

And we looked at this in large sense with an understanding of how the private-label programs work in conjunction with the -- the Defendants. There is a basic operation for their normal course of business, and these incremental transactions contribute an extra margin, an additional margin, additional revenues that have their own profitability. And those revenues would not exist if it weren’t for the functionality of the patents-in-suit.

(*Id.* at 125:23-126:6.) In addition, the '572 patent itself ties the infringed claims to the commercial activity through the claim term “commerce object,” which the Court defined as a “third-party merchant’s: catalog, category, product (goods or services), or dynamic selection,” and the claim term “merchant,” which the Court defined as a “[p]roduce, distributor, or reseller of goods or services to be sold.” (Dkt. No. 560 at 6-7.)

Ultimately, the jury considered the evidence presented and awarded DDR \$750,000 for Digital River’s infringement of the '572 patent, significantly less than the amount DDR was seeking. On balance, the Court has no basis from which to find that the verdict lacks a sufficient evidentiary basis that a reasonable jury could not have found as the jury did in this case.

#### **F. Conclusion**

Based on the foregoing, the Court **DENIES** Defendant Digital River, Inc.’s Renewed Motion for Judgment as a Matter of Law Pursuant to Fed. R. Civ. P. 50(b) (Dkt. No. 540).

#### **V. NLG’S RENEWED MOTION FOR JUDGMENT AS A MATTER OF LAW PURSUANT TO FED. R. CIV. P. 50(B) (DKT. NO. 539)**

NLG seeks judgment as a matter of law pursuant to Fed. R. Civ. P. 50(b) to (1) vacate the jury verdict of direct infringement of the asserted claims in the '572 and '399 patents, (2) vacate the jury verdict of no invalidity of the asserted claims in the '572 and '399 patents, (3) vacate the jury award because the Court improperly excluded evidence of non-accused websites, and (4) set aside or reduce the damages award as grossly excessive and against the greater weight of the evidence. Interestingly however, NLG does not move for a new trial pursuant to Rule 59 on the grounds that the jury verdict is against the weight of the evidence.

### **A. Judgment as a Matter of Law Regarding Direct Infringement**

NLG first contends that the jury determination of direct infringement is not supported by substantial evidence because DDR's infringement expert, Dr. Keller, did not establish all of the requisite claim elements. (Dkt. No. 539 at 4.)

#### *i. The "look and feel" elements*

NLG argues that Dr. Keller failed to offer competent or satisfactory evidence of the correspondence of look and feel between the host and NLG websites because he offered only conclusory and non-specific statements about how the "look and feel" elements are satisfied. On review of the record, the Court disagrees. As an initial matter, the jury had the published images of all nine website pairs as evidence before it to make the ultimate factual determination that the look and feel of the host corresponded to the accused NLG websites. (*See* PX617, pp. 1-2, 20-21, 35-36, 49-52, 53-54, 55-56, 57-60, 61-62, 63-64.) Additionally, DDR presented expert testimony comparing the websites pairs for substantial similarities and listing out the similarities in a demonstrative exhibit before the jury. (10/9/2012 PM Tr. at 8:3-36:22.) Thus, the jury's verdict is supported by substantial evidence of infringement as to the "look and feel" elements.

#### *ii. Claim 17 of the '572 patent*

NLG contends that there is no substantial evidence that NLG directly infringes step (a) of claim 17 in the '572 patent by controlling or directing its partners to provide links to NLG's site on their host sites. (Dkt. No. 539 at 6.) However, both DDR's expert witness, Dr. Keller, and NLG's expert witness, Mr. Gray, testified at trial that NLG gives the URL or link to their partners to place on their host websites for customers to access the outsource website. (10/9/2012 PM Tr. at

17:15-23; 10/11/2012 AM Tr. at 126:11-19.) Thus, the jury was presented with evidence sufficient to show that NLG controls its partners' action by giving them the link to place on their host sites.

*iii. Claim 13 of the '572 patent*

NLG argues that DDR did not establish that the NLG computer processor is in communication through the Internet with the host web page as required by claim 13 of the '572 patent. (Dkt. No. 539, at 6.) However, DDR's expert witness testified that "When the computer server receives a request, when a link is clicked on or activated on the host webpage, that's how the host webpage is communicating through the Internet with the computer processor or the server." (10/9/2012 PM Tr., at 12:17-25.) Thus, the record contains clear and substantial evidence to support a jury finding that this claim element is met.

*iv. Claims 1 and 19 of the '399 patent*

NLG argues that DDR did not establish that its system automatically recognizes or identifies the source web page as required by claims 1 and 19 of the '399 patent. (Dkt. No. 538 at 7.) Although NLG acknowledges that Dr. Keller's testimony and his report establish that the computer processor determines the partner using a code (e.g., OBWEB for Orbitz), NLG contends there is no evidence that the computer processor identifies the source page. (*Id.* at 7-8). However, NLG does not show where in the claim language or the Court's claim construction is there a requirement for a party to recognize the exact web address of the source web page to infringe. When opposing experts differ on how a claim limitation is met, as is the case here, it is up to the jury to decide which opinion is more credible in light of the evidence. In this case, the jury made such a determination based on substantial evidence in the record to support their finding that this claim element is met.

v. *Infringement for more than one day*

NLG also takes issue with the fact that DDR did not show infringement except for the single days on which Dr. Keller examined each website. (Dkt. No. 539 at 8.) However, Dr. Keller testified that, in forming his opinions, he considered the systems as a whole, “both documents about them and source code,” including “the date that they -- that they used to operate these systems” and “deposition transcripts where the people who work for the Defendants describe how their systems operated.” (10/9/2012 AM Tr. at 80:18-81:17.) In addition, Dr. Keller testified that, “with respect to the host websites that are partners with the Defendants,” he “looked at the websites sometimes the present current website, also past websites in order to be able to see whether the look and feel of the outsource website matches an overall appearance, the look and feel of the host website.” (*Id.*) Dr. Keller further testified that he looked at “past websites” using Internet archives. (*Id.* at 81:16-82:3.)

Dr. Keller also reviewed technology NLG was currently using and compared that to “different technology” that NLG used in the past and found that although the “software [that] implemented [it] changed, ... the basic functionality is unchanged” and “the data is the same,” including “the same data describing the stores, the look-and-feel description, et cetera.” (10/9/2012 PM Tr. at 3:22-4:15.) Moreover, Dr. Keller testified that, from his examination of source code throughout the period of infringement, he did not find anything that “had changed in any substantial way” compared to the examples that he gave during specific testimony discussing the various hosts. (*Id.* at pp. 4-45.)

The record before the Court and the evidence presented at trial is clear that Dr. Keller considered the accused systems as a whole, including the dates of operation, how the systems

operated, the current website, as well as past websites. There is substantial evidence to support the jury's finding that NLG infringed for more than the one day during which a screenshot was captured.

**B. Judgment as a Matter of Law Regarding Invalidity For Failing to Claim Patentable Subject Matter**

NLG asks the Court to find the asserted claims of the '572 and '399 patent invalid as unpatentable subject matter under 35 U.S.C. § 101 because the invention is merely a business model known as "syndicated commerce" applied to the Internet. (Dkt. No. 539 at 9.) NLG points to the trial transcript for support because the named inventors used the word "idea" at least 25 times to describe his invention. NLG argues that there is nothing computer-specific about making two e-commerce web pages look like each other, and the asserted claims recite only generic functionalities that any general purpose computer can perform.

*i. Applicable Law*

35 U.S.C. § 101 defines the four categories of inventions or discoveries that are eligible for patent protection:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

35 U.S.C. § 101. "In choosing such expansive terms ... modified by the comprehensive 'any,' Congress plainly contemplated that the patent laws would be given wide scope." *Bilski v. Kappos*, 130 S.Ct. 3218, 3225 (citing *Diamond v. Diehr*, 450 U.S. 175, 308, 100 S.Ct. 2204 (1981)). "Congress took this permissive approach to patent eligibility to ensure that 'ingenuity should receive a liberal encouragement.' " *Id.* (citing 450 U.S. at 308-309, 100 S.Ct. 2204).



The Supreme Court has recognized three specific exceptions to the broad domain of patentable subject matter encompassed by § 101: “laws of nature, physical phenomena, and abstract ideas.” *Bilski*, 130 S.Ct at 3225. Laws of nature and physical phenomena are not patentable subject matter “because those categories embrace ‘the basic tools of scientific and technological work.’” *Research Corp. Techs., Inc. v. Microsoft Corp.*, 627 F.3d 859, 867-68 (Fed. Cir. 2010) (citing *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)). The Court can determine invalidity of a patent under 35 U.S.C. § 101 for failing to claim patentable subject matter as a matter of law. *Arrhythmia Research Tech., Inc. v. Corazonix Corp.*, 958 F.2d 1053, 1055 (Fed. Cir. 1992).

However, the rule against patents on naturally occurring things is “not without limits,” for “all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas,” and “too broad an interpretation of this exclusionary principle could eviscerate patent law.” *Association for Molecular Pathology, et al. v. Myriad Genetics, Inc., et al.*, --- S.Ct. ---, 2013 WL 2631062, at \*7 (citing *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 132 S.Ct. 1289, 1293 (2012)). “As we have recognized before, patent protection strikes a delicate balance between creating ‘incentives that lead to creation, invention, and discovery’ and ‘imped[ing] the flow of information that might permit, indeed spur, invention.’” *Id.* (citing 132 S.Ct. at 1305). Moreover, “a process is not unpatentable simply because it contains a law of nature or a mathematical algorithm,” and “an *application* of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.” *Diamond v. Diehr*, 450 U.S. 175, 187, 100 S.Ct. 1048 (1981) (internal quotation marks omitted).

In addition, “[a]bstractness, also a disclosure problem addressed in the Patent Act in section 112, also places subject matter outside the statutory categories.” *Research Corp.*, 627 F.3d at 868. An abstract idea “should exhibit itself so manifestly as to override the broad statutory categories of eligible subject matter and the statutory context that directs primary attention on the patentability criteria of the rest of the Patent Act.” *Id.* “[I]nventions with specific applications or improvements to technologies in the marketplace are not likely to be so abstract that they override the statutory language and framework of the Patent Act.” *Id.* at 869.

Furthermore, “it bears remembering that all issued patent claims receive a statutory presumption of validity ... that presumption applies when § 101 is raised as a basis for invalidity in district court proceedings.” *CLS Bank Int’l, et al. v. Alice Corp. Pty. Ltd.*, 2013 WL 1920941, at \*12 (Fed. Cir. May 10, 2013) (Lourie, J., *et al.*, concurring).

*ii. Analysis*

NLG only asserts the application of the “abstract ideas” exception in this case. NLG contends claims 13, 17, and 20 of the ’572 patent and claims 1, 3 and 9 of the ’399 patent are invalid under 35 U.S.C. § 101 because they do not satisfy the machine-or-transformation test and otherwise disclose an abstract idea. Claims 13 and 17 of the ’572 patent are independent claims. They read:

**Claim 13.** An e-commerce outsourcing system comprising:

- a) a data store including a look and feel description associated with a host web page having a link correlated with a commerce object; and
- b) a computer processor coupled to the data store and in communication through the Internet with the host web page and programmed, upon receiving an indication that the link has been activated by a visitor computer in Internet communication with the host web page, to serve a composite web page to the visitor computer wit [sic] a look and feel based on the look and feel description in the data store and with content based on the commerce object associated wit [sic] the link.

**Claim 17.** An e-commerce outsourcing process comprising the steps of:

- a) storing a look and feel description associated with a first website in a data store associated with a second website;
- b) including within a web page of the first website, which web page has a look and feel substantially corresponding to the stored look and feel description, a link correlating the web page with a commerce object; and
- c) upon receiving an activation of the link from a visitor computer to which the web page has been served, sending to the visitor computer from the second website a composite web page having a look and feel corresponding to the stored look and feel description of the first website and having content based on the commerce object associated with the link.

Claim 1 of the '399 patent is an independent claim. It reads:

**Claim 1.** A method of an outsource provider serving web pages offering commercial opportunities, the method comprising:

- (a) automatically at a server of the outsource provider, in response to activation, by a web browser of a computer user, of a link displayed by one of a plurality of first web pages, recognizing as the source page the one of the first web pages on which the link has been activated;
  - (i) wherein each of the first web pages belongs to one of a plurality of web page owners;
  - (ii) wherein each of the first web pages displays at least one active link associated with a commerce object associated with a buying opportunity of a selected one of a plurality of merchants; and
  - (iii) wherein the selected merchant, the outsource provider, and the owner of the first web page are each third parties with respect to one other;
- (b) automatically retrieving from a storage coupled to the server pre-stored data associated with the source page; and then
- (c) automatically with the server computer-generating and transmitting to the web browser a second web page that includes:
  - (i) information associated with the commerce object associated with the link that has been activated, and
  - (ii) a plurality of visually perceptible elements derived from the retrieved pre-stored data and visually corresponding to the source page.

Claim 13 is a system claim. Claim 17 and claim 1 are process and method claims. The Court finds no meaningful distinction between the asserted “system,” “process,” and “method” claims for purposes of this § 101 analysis, and will consequently analyze them together. *Bancorp Services, L.L.C. v. Sun Life Assurance Co. of Canada (U.S.), et al.*, 687 F.3d 1266, 1276-77 (Fed. Cir. 2012).

In its analysis, the Court looks “not just to the type of claim but also ‘to the underlying invention for patent-eligibility purposes.’” *Id.* (citing *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1374 (Fed. Cir. 2011)). Thus, as the Supreme Court has explained, the form of the claims should not trump basic issues of patentability. *See Parker v. Flook*, 437 U.S. 584, 593, 98 S.Ct. 2522 (1978). Here, each of the claims at issue involves storing and serving webpages having the similar look and feel of another and different webpage. There is little material difference between these categories of claims in the asserted patents for patentability analysis.

NLG’s primary argument boils down to a contention that the claims disclose the business method of making two e-commerce web pages look alike; the method is no more than an abstract idea that is not dependent on computer components. In response, DDR asserts that the invention is not a method of doing business, but rather methods of displaying composite web pages that require the computer and processor to have specific tangible parts, be programmed in certain particular ways, contain specific data, and be capable of performing specific steps recited in the claims. On review of the claims at issue, the Court concludes that they are not “so manifestly” abstract as to override the statutory language of § 101. *Research Corp.*, 627 F.3d at 868.

The claimed e-commerce outsourcing system discloses a specific set of physical linkages, including, coupling between the data store and the processor, the data store storing a look and feel description associated with a host web page and the processor programmed in certain ways to serve a composite web page. The claimed e-commerce outsourcing process requires a similar interaction between a data store storing a look and feel description of a web page and an activation of a link from a visitor computer to receive a composite web page. The method of an outsource provider also discloses a server that responds to activation by a web browser of a computer user by

retrieving pre-stored data from storage, then generating and transmitting visual elements corresponding to the source page. Each of these claimed inventions “presents functional and palpable applications in the field of computer technology.” *Research Corp.*, 627 F.3d at 868. Like the claimed invention in *Research Corp.*, the process of displaying composite web pages represents an improvement to computer technologies in the marketplace. “[I]nventions with specific applications or improvements to technologies in the marketplace are not likely to be so abstract” as to be ineligible for patent protection. *Id.*

The claimed invention also passes the machine-or-transformation test. “Under the Court of Appeals’ formulation, an invention is a ‘process’ only if: ‘(1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing.’” *Bilski*, 130 S.Ct., at 3225-6 (citing *Diamond*, 450 U.S. at 182). Although the machine-or-transformation test is not the sole test for deciding whether an invention is patent-eligible, it remains a useful and important indicator in the § 101 analysis. *Id.* at 3227.

As discussed above, the asserted claims disclose a specific set of physical linkages that involve a data store, server, computer, that together, and through the claimed interconnectivity, accomplishes the process of displaying composite web pages having the look and feel of the source web page. NLG urges the Court to find the invention is only a business method of making two web pages look alike. While the ’572 and ’399 patents do, indeed, cover the concept of two web pages with visually corresponding elements, there is more to the asserted claims when considered as a whole. “*Diehr* emphasized the need to consider the invention as a whole, rather than ‘dissect[ing] the claims into old and new elements and then ... ignor[ing] the presence of the old elements in the analysis.’” *Bilski*, 130 S.Ct., at 3230 (citing *Diehr*, 450 U.S. at 177). When the asserted claims are

considered as a whole, the claimed invention lies in stark contrast to the facts of *Bancorp*. In *Bancorp*, the claimed “mathematical concept of managing a stable value protected life insurance policy” was found unpatentable as an abstract idea because mere mathematical computer was not dependent upon the computer components required to perform it. 687 F.3d at 1279-80. In contrast, the interactions and linkages of computer machinery to generate composite web pages in this case are integral to each of DDR’s asserted claims. Accordingly, the first prong of the machine-or-transformation test is satisfied. That being the case, this Court needs not address the transformation prong at this time.

The Court is also not persuaded that the inventor’s use of the word “idea” at least 25 times to describe his invention is evidence of unpatentable subject matter. The inventor’s testimony was given during a one week trial, and it is not unusual to explain a patent claim as a “gist” or “core idea.” Such testimony is not instructive that a claim is an abstract idea for purposes of § 101 patentability. Moreover, “all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas,” yet, “too broad an interpretation of this exclusionary principle could eviscerate patent law.” *Mayo*, 132 S.Ct. at 1293.

Accordingly, the Court does not find that NLG has met its burden to show by clear and convincing evidence that the asserted claims of the ’572 and ’399 patents are invalid for failure to claim patentable subject matter under 35 U.S.C. § 101.

**C. Judgment as a Matter of Law that the Asserted Claims are Indefinite as a Matter of Law**

NLG contends that the “look and feel” terms render the asserted claims invalid as indefinite because there is no objective standard for determining whether a pair of web pages has the same “look and feel.” (Dkt. No. 539 at 16.) NLG’s argument is essentially a repeat of Digital

River’s renewed motion for judgment of law on the same subject (Dkt. No. 540). Although Digital River’s motion addressed only the ’572 patent and not the ’399 patent, the indefiniteness arguments center on similar claim terms present in both patents. The Court previously construed “visually perceptible elements” in the ’399 patent to mean “look and feel elements that can be seen.” (Dkt. No. 309 at 10.) Thus, the Court’s ruling that Digital River has not met its burden to show by “clear and convincing evidence that a skilled artisan could not discern the boundaries of the claim based on the claim language, the specification, and the prosecution history, as well as her knowledge of the relevant art area,” is equally applicable to NLG’s parallel arguments. *Halliburton*, 514 F.3d at 1249-50.

The one extra point that NLG makes in this Motion is that indefiniteness can be found in DDR’s inconsistent infringement contentions, where Dr. Keller opined that web page pairs for NLG and its partners have the same look and feel, whereas web page pairs for the current American Airlines page are not alleged to have the same look and feel. (Dkt. No. 539 at 18.) For support, NLG cites Dr. Keller’s trial testimony. (10/9/2012 PM Tr. at 62:4-9.) In response, DDR clarifies that shortly after NLG’s citation of Dr. Keller’s testimony, and in the same testimony sequence, Dr. Keller said “I haven’t made an opinion as to whether they are substantially the same or not right now in my report.” (10/9/2012 PM Tr. at 68:4-6.) The Court does not find Dr. Keller’s testimony to be inconsistent. The Court finds that NLG has failed to meet its burden by clear and convincing evidence to establish that the “look and feel” claim term is insolubly ambiguous.

Accordingly, judgment as a matter of law as to a finding of indefiniteness is denied.

**D. Judgment as a Matter of Law that the Court Improperly Excluded Evidence of Non-accused Websites**

NLG contends the Court committed prejudicial error by precluding it from questioning witnesses or eliciting testimony relating to non-accused websites, but does not identify the remedy it seeks. (Dkt. No. 539.) Although this is raised in a 50(b) motion, NLG’s argument is more in line with the requisite standard for a motion for new trial under Rule 59. “A new trial may be granted, for example, if the district court finds the verdict is against the weight of the evidence, the damages awarded are excessive, the trial was unfair, or prejudicial error was committed in its course.” *Transworld Drilling*, 773 F.2d at 612-13. Therefore, the Court will construe this issue as a request for a new trial.

The core of NLG’s contention is that the Court acted unfairly by excluding evidence of non-accused websites that run on the same platform as the accused websites, although such evidence is “directly relevant to issues of non-infringement, invalidity for indefiniteness, and invalidity for failing to claim patentable subject matter,” and “would have helped to make clear the issues in this case for the Court and the jury.” (Dkt. No. 539 at 19.) In response, DDR argues that the Court did not bar NLG from questioning witnesses or eliciting testimony relating to non-accused websites generally. The Court agrees. The Court’s grant of DDR’s motions *in limine* Nos. 2 and 3 (Dkt No. 481) was not a definitive ruling on the admissibility of evidence, but is merely an order requiring the offering party to first approach the bench and seek leave from the Court prior to mentioning such matters before the jury. When the parties approached the bench on a particular evidentiary matter regarding the American Airlines site, the Court considered the parties arguments, and exercised its discretion in making a limited ruling:

The Court: “Okay. There is a clear point in time at which the Plaintiffs have accused you of infringement. The sites and screenshots that take place outside



of that clear point of reference in time, to me, I don't see the relevance. That's what I understand the basis of your objection is.

Mr. Crosby: That is, yes.

The Court: You're welcome -- you're welcome to cross-examine this witness on materials that come from his report that relate to the period of time in which your client's accused of infringement, but to put up screenshots that are later in time than the period of the infringement or the accused infringement is potentially confusing and irrelevant.

(10/9/2012 PM Tr. at 71:6-19.) Nonetheless, the Court still permitted trial testimony relating to the non-accused American Airlines website, even though NLG may consider it to be limited. (*Id.* at 67:19-68:17.)

Also, the Court does not find that NLG has shown that the evidence it would have presented about the non-accused websites "points so strongly and overwhelmingly" in its favor that reasonable persons could not have arrived at a contrary conclusion as the jury verdict. *Dawson*, 978 F.2d at 208. NLG presents no specific reasons why the jury would have ruled in NLG's favor had they seen more evidence of non-accused websites; its arguments can be boiled down to hollow allegations that such evidence "would have helped to make clear the issues in this case." (Dkt. No. 539 at 19.) Accordingly, the Court does not find that it has precluded NLG from questioning witnesses or eliciting testimony relating to non-accused websites or permitted such prejudice toward NLG as to warrant a new trial.

**E. Judgment as a Matter of Law that the Jury's Damages Award Should be Set Aside**

NLG contends that the jury's damages award should be set aside or reduced because it is grossly excessive and against the greater weight of the evidence. NLG argues the damages award is flawed and lists multiple reasons why DDR's damages claim was improper, including application of the 5.5% royalty rate, ignoring deductible costs, including telephone sales in the royalty base, and failure to consider acceptable non-infringing substitutes. DDR responds that

even if NLG's criticisms are correct, showing error in DDR's damages claim does not demonstrate any error in the jury's damages award. The Court agrees. Determining the credibility of the evidence and weighing the evidence are within the exclusive purview of the jury. *Reeves*, 530 U.S. at 150-51. Absent evidence that points so overwhelmingly in favor of NLG that no reasonable jury could return a contrary verdict, the Court properly assumes that the jury chose to believe or disbelieve the testimony they heard as a part of weighing all the evidence and then reaching their verdict. *RSR Corp.*, 426 F.3d at 296.

NLG also argues that the damages award is grossly excessive because DDR did not establish infringement for more than one specific date for which Dr. Keller presented screen shots in his report. This is an obvious repetition of NLG's earlier argument that DDR did not show infringement except for the single days on which Dr. Keller examined each website. (Dkt. No. 539, at 8.) As discussed earlier, the record is clear that Dr. Keller considered the accused systems as a whole and DDR's claims are not limited to the specific date the screen shots were captured.

The Court has no specific insights into how the jury precisely arrived at its award in this case. Consequently, NLG cannot attempt to reverse engineer the jury's math in reaching the \$750,000 award and use its substituted, and purely speculative, analysis to call the award excessive. Absent further insight into the jury's apportionment, the Court does not find that the verdict lacks sufficient evidentiary basis for a reasonable jury to find as this jury did in this case.

## **F. Conclusion**

Based on the foregoing, the Court **DENIES** National Leisure Group, Inc.'s and World Travel Holdings, Inc.'s Renewed Motion for Judgment as a Matter of Law Pursuant to Fed. R. Civ. P. 50(b) (Dkt. No. 539).

**VI. DIGITAL RIVER'S MOTION FOR NEW TRIAL PURSUANT TO FEDERAL RULE OF CIVIL PROCEDURE 59 (DKT. NO. 562)**

Pursuant to Fed. R. Civ. P. 59, Digital River moves for a new trial with respect to invalidity of the '572 patent based on lack of enablement, invalidity based on anticipation and/or obviousness, non-infringement, and damages. (Dkt. No. 562.) All of Digital River's arguments, with the exception of the enablement issue, rely on the same arguments as addressed above in the section on Digital River's renewed judgment as a matter of law. Based on the same reasoning as discussed above, the Court disagrees with each of Digital River's arguments and does not find the verdict to be against the weight of the evidence. The Court will now specifically address the enablement argument.

**A. Digital River waived its enablement defense as to the "look and feel" elements**

Digital River contends that it is entitled to a new trial on the issue of whether the asserted claims of the '572 patent are invalid for lack of enablement because it fails to teach one of ordinary skill in the art the concept of "look and feel." (Dkt. No. 562 at 3-4.) Digital River argues that it had presented more than sufficient evidence at trial to support the submission of a question and instruction on enablement in the jury charge, which the Court denied. Digital River also argues that it was prejudiced by the Court's failure to instruct the jury where a lack of enablement constitutes an independent ground for invalidating all the asserted claims.

In response, DDR asserts that Digital River waived its new enablement defense by failing to disclose it in advance of trial, either through its interrogatory answers or its invalidity contentions. (Dkt. No. 564 at 1.) Although Digital River touched on lack of enablement in light of another claim term, DDR contends that none of those disclosures hint at a non-enablement defense relating to the "look and feel" term.

Local Patent Rule 3.3(d) requires each party opposing a claim of patent infringement to serve invalidity contentions which disclose “[a]ny grounds of invalidity based on indefiniteness under 35 U.S.C. § 112(2) or enablement or written description under 35 U.S.C. § 112(1) of any of the asserted claims.” On review of Digital River’s amended invalidity contentions, the Court finds that it only asserted lack of enablement based on the “link correlated with a commerce object” limitation. (*See* Dkt. No. 564, Ex. 3.) Digital River did not put forward a lack of enablement based on the “look and feel” element at any point before trial either by complying with its disclosure obligations, responding to discovery, or in its invalidity expert report. Further, Digital River did not raise this issue during trial. During the charge conference, the Court struck the non-enablement jury instruction because Digital River had presented no arguments or evidence at trial based on the disclosed enablement defense. Nonetheless, Digital River did not specifically mention lack of enablement of the “look and feel” term in making its objection. (10/12/2012 AM Tr. at 10:8-13:15.) In essence, Digital River did not provide notice to DDR or the Court of its enablement defense based on the “look and feel” term until raising it for the first time in their Rule 59 motion.

One purpose of Patent Rule 3.3 is for early disclosure and notice of the Defendant’s invalidity-based defenses to facilitate discovery and the preparation of both sides’ claims and defenses well in advance of trial. Just as a prior art reference has to be specifically disclosed on an element-by-element level in a claim chart format, a § 112(2) defense must at least identify the claim element that causes a claim to fail for lack of enablement. Contrary to Digital River’s argument, the Court does not find there to be sufficient disclosure of this issue in the pleadings or at any time prior to this motion. Additionally, this Court is not receptive to Digital River’s argument that it may disclose the specific theory of non-enablement for the first time in the trial

testimony. Such would emasculate Rule 3.3 and return the litigants to the discredited practice of trial by ambush.

For the foregoing reasons, the Court finds that Digital River has waived its enablement defense as to the “look and feel” element. Accordingly, the Court does not reach the merits of Digital River’s invalidity defense for lack of enablement of the “look and feel” element.

## B. Conclusion


Based on the foregoing, the Court **DENIES** Defendant Digital River, Inc.'s Motion for New Trial Pursuant to Fed. R. Civ. P. 59 (Dkt. No. 562).

## VII. CONCLUSION

For the reasons discussed, the Court: (1) **DENIES** Defendant Digital River, Inc.’s Renewed Motion for Judgment as a Matter of Law Pursuant to Fed. R. Civ. P. 50(b) (Dkt. No. 540); (2) **DENIES** National Leisure Group, Inc.’s and World Travel Holdings, Inc.’s Renewed Motion for Judgment as a Matter of Law Pursuant to Fed. R. Civ. P. 50(b) (Dkt. No. 539); and (3) **DENIES** Defendant Digital River, Inc.’s Motion for New Trial Pursuant to Fed. R. Civ. P. 59 (Dkt. No. 562).

**So Ordered and Signed on this**

# Jun 20, 2013

  
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RODNEY GILSTRAP  
UNITED STATES DISTRICT JUDGE

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

**DDR HOLDINGS, LLC**

*Plaintiff and Counterdefendant,*

v.

**HOTELS.COM, L.P., et al.**

*Defendants and Counterclaimants.*

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CIVIL ACTION NO. 2:06-cv-42-JRG

**MEMORANDUM OPINION AND ORDER**

**I. INTRODUCTION**

Before the Court is Plaintiff DDR Holdings, LLC's ("DDR") Motion for Entry of Judgment. (Dkt. No. 538.) Having considered the parties' written submissions, the Court **GRANTS** DDR's Motion as set forth below. The Court has separately entered a Final Judgment contemporaneously herewith, consistent with the findings and holdings of this Opinion.

**II. FACTS & PROCEDURAL BACKGROUND**

On October 12, 2012, following a week-long trial, the jury returned a verdict in favor of DDR, finding that Digital River, Inc. ("Digital River") had infringed claims 13, 17 and 20 of United States Patent No. 6,993,572 ("the '572 Patent") and awarding DDR \$750,000.00 in damages. The jury also found that Defendant National Leisure Group, Inc. and World Travel Holdings, Inc. ("NLG/WTH") infringed claims 13, 17 and 30 of the '572 Patent, as well as claims 1, 3 and 19 of United States Patent No. 7,818,399 ("the '399 Patent") and awarded damages to DDR of \$750,000.00. The jury further determined that claims 13, 17 and 20 of the '572 Patent were not invalid.

### III. DISCUSSION

#### A. Prejudgment Interest

The parties dispute whether pre-judgment interest should be awarded in DDR’s favor and, if so, in what amount. DDR contends that it is entitled to prejudgment interest from both Defendants beginning from the date of the parties’ hypothetical negotiation calculated at the average prime rate (4.83%), compounded annually. (Dkt. No. 538, at 3.) Digital River contends that (1) DDR is entitled to prejudgment interest at the statutory, not the prime, rate; (2) that DDR is not entitled to prejudgment before 2010; and (3) that DDR is not entitled to prejudgment interest during the four-year stay of this litigation during a USPTO reexamination of the asserted patents. (Dkt. No. 545.) NLG/WTH joins in Digital River’s opposition, and further asserts that DDR is not entitled to prejudgment interest because “DDR is a non-practicing entity and should not be entitled to prejudgment interest.” (Dkt. No. 543.)

Upon a finding of patent infringement, “the court shall award patent damages ... together with interest and costs as fixed by the court.” 35 U.S.C. § 284. Prejudgment interest should be awarded under Section 284 absent some justification for withholding such an award. *Gen. Motors Corp. v. Devex Corp.*, 461 U.S. 648, 657 (1983); *Telcordia Techs., Inc. v. Cisco Sys., Inc.*, 612 F.3d 1365, 1378 (Fed. Cir. 2010). The purpose of prejudgment interest is to place the patentee in as good a position as he would have been had the infringer paid a reasonable royalty instead of infringing. *Beatrice Foods v. New England Printing*, 923 F.2d 1576, 1580 (Fed. Cir. 1991).

*1. Prejudgment Interest Begins at the Date of the Hypothetical Negotiation*

The first question the Court must resolve in determining the issue of pre-judgment interest is the date when pre-judgment interest should begin to accrue. DDR contends that such date should be January 31, 2006, which was the date of the hypothetical negotiation as set by Defendants’ joint damages expert. (Dkt. No. 531, at 12-13) (“And that’s the opinion I have with respect to the payment structure that the parties would have agreed to, if they had gotten together and negotiated a license earlier in time, in [January] 2006, during ... a hypothetical negotiation.”)

Digital River argues, however, that the date of the parties’ hypothetical negotiation is immaterial, because DDR’s damages expert based his damages model against Digital River upon accused products sold only from 2010 to 2012. (Dkt. No. 545.) Digital River contends that DDR is precluded from obtaining prejudgment interest from 2006 to 2012, when DDR’s expert only calculated damages based on revenue from **2010** to 2012. *Id.*

In this case, the Court instructed the jury to award damages running from the date of the hypothetical negotiation, which in this case was agreed to by all parties to be January 31, 2006. As Digital River’s damages expert testified at trial, “you kind of need the hypothetical negotiation to happen right around the time of the ***alleged first infringement***, because that’s the time when whoever’s accused of using the technology or the teachings of the patents-in-suit would have needed a license ... And that would be in ***January 2006*** ...” (Dkt. No. 531, at 15) (emphasis added). Although DDR’s expert presented Digital River from only 2010 to 2012, the jury was clearly instructed to award DDR a “royalty payment that a patent holder and the infringer ... would have agreed to in a hypothetical negotiation taking place at a time period just prior to when the infringement first began.” (Dkt. No. 532, at 61-62.) Thus, the jury’s \$750,000.00 damages



award constituted an award to DDR for Digital River’s infringement occurring just prior to the first infringement; in this case, January 2006.

2. *DDR is Entitled to Prejudgment Interest During the Time-Period that this Case was Stayed Pending Reexamination*

Both Digital River and NLG/WTH argue that, regardless of the time when prejudgment interest begins to accrue, DDR is not entitled to prejudgment interest during the four year stay of this case while the asserted patent claims were undergoing reexamination at the USPTO. (Dkt. No. 545, at 4); (Dkt. No. 543, at 2.) Specifically, the Defendants ask this Court to toll the prejudgment interest from December 19, 2006 (the date this Court granted DDR’s motion to stay the litigation) to October 6, 2010 (the date this Court granted DDR’s motion to reopen the case). (Dkt. No. 178, 194.)

Defendants acknowledge that Court’s customarily decline to toll prejudgment interest while re-examination proceedings are pending, but argue that the present case is distinguishable because: (1) the party seeking to recover prejudgment interest (DDR) is the party that initiated the re-examination proceedings; (2) DDR initiated the re-examination proceedings voluntarily and unilaterally; (3) DDR is the party that moved to stay the litigation; (4) Digital River opposed the stay of the litigation; and (4) the re-examination proceeding stayed the litigation for four year, a period longer than the parties actually spent litigating the case; and (5) the re-examination proceeding did not result in the narrowing of any issues in the litigation. (Dkt. No. 545, at 5) (Dkt. No. 543, at 2-5.)

Withholding prejudgment interest “is the exception, not the rule.” *Lummus Indus., Inc. v. D.M. & E. Corp.*, 862 F.2d 267, 275 (1988). Defendants do not cite one case where another Court has denied a plaintiff’s motion for prejudgment interest during the period of reexamination. At

best, Defendants cite to cases that suggest that a Court may deny prejudgment interest for undue delay. But at least one other District Court, in a case directly on-point, has expressly ruled that a Plaintiff-initiated reexamination does not constitute undue delay with regard to the prejudgment interest inquiry:

In this case ... Plaintiff sought the stay and Defendant opposed it. However, just as in *Allen*, the stay conserved judicial and attorney resources. Had the reexamination resulted in the rejection of the claim in question, Krippelz would have had to narrow or cancel the claim, or appeal the decision of the reexamination, and the litigation would have taken a different track or come to an end. Even though Krippelz ‘caused’ the delay by requesting a stay, because the stay conserved the resources of the parties and the court, it was neither unreasonable nor unjustified. For this reason, prejudgment interest should be awarded for the period during with the case was stayed.

*See Krippelz v. Ford Motor Co.*, 670 F. Supp. 2d 815, 819-20 (N.D. Ill. 2009). The Court agrees with the analysis in *Krippelz*, the reexamination conserved judicial and party resources and it was not unreasonable or unjustified for DDR to seek a stay. For at least this reason, the Court declines to toll accrual of prejudgment interest during the reexamination of the claims.

### *3. DDR’s Status as a Non-Practicing Entity Does Not Preclude an Award of Prejudgment Interest*

NLG/WTH contends that “DDR is a non-practicing entity and should not be entitled to prejudgment interest.” (Dkt. No. 543, at 4.) NLG/WTH does not cite to *any* case law to support its position, but rather argues that “any damage DDR has sustained has been addressed through the jury award, and adding prejudgment interest to such an award would give DDR, a non-practicing entity, a windfall. (Dkt. No. 543, at 4.) After reviewing the parties’ written submissions, the Court finds no justification or basis to support NLG/WTH’s argument that DDR should be precluded from an award of prejudgment interest because it is a non-practicing entity.

*4. Prejudgment Interest is Calculated Using the Prime Rate*

Prejudgment interest on the actual damages assessed against Digital River and NLG/WTH shall be paid from the date of the hypothetical negotiation calculated at the average prime rate (4.83%), compounded annually.

**B. Post-Judgment Interest**

The parties agree that post-judgment interest should be set, pursuant to 28 U.S.C. §1961(a), at the statutory rate. The Court concurs.

**C. Costs**


DDR argues that, as the prevailing party in this litigation, it is entitled to costs consistent with Federal Rule of Civil Procedure 54(d) and 28 U.S.C. § 1920. The Defendants do not oppose this request. Therefore, the Court awards costs to DDR.

**IV. Conclusion**

A consistent Final Judgment is entered contemporaneously herewith.

**So Ordered and Signed on this**

**Jun 20, 2013**

  
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RODNEY GILSTRAP  
UNITED STATES DISTRICT JUDGE

(12) **United States Patent**  
**Ross, Jr. et al.**

(10) **Patent No.:** **US 6,993,572 B2**  
(45) **Date of Patent:** **\*Jan. 31, 2006**

(54) **SYSTEM AND METHOD FOR  
FACILITATING INTERNET COMMERCE  
WITH OUTSOURCED WEBSITES**

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(75) Inventors: **D. Delano Ross, Jr.**, Alpharetta, GA (US); **Daniel D. Ross**, Dunwoody, GA (US); **Joseph R. Michaels**, Marietta, GA (US); **William R. May**, Atlanta, GA (US); **Richard A. Anderson**, Powder Springs, GA (US)

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(73) Assignee: **DDR Holdings, LLC**, Dunwoody, GA (US)

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 104 days.

This patent is subject to a terminal disclaimer.

(Continued)

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(21) Appl. No.: **10/461,997**

*Primary Examiner*—Jason D Cardone

(22) Filed: **Jun. 11, 2003**

(74) *Attorney, Agent, or Firm*—Louis J. Hoffman

(65) **Prior Publication Data**

US 2004/0148366 A1 Jul. 29, 2004

**Related U.S. Application Data**

(63) Continuation of application No. 09/398,268, filed on Sep. 17, 1999, now Pat. No. 6,629,135.

(60) Provisional application No. 60/100,697, filed on Sep. 17, 1998.

(51) **Int. Cl.**  
**G06F 15/16** (2006.01)  
**G06F 17/21** (2006.01)

(52) **U.S. Cl.** ..... **709/218; 715/501.1**

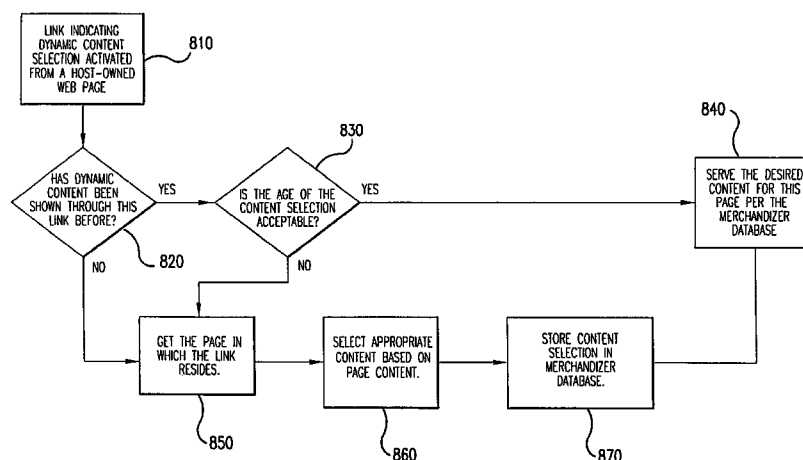
(58) **Field of Classification Search** ..... 709/218, 709/219, 228; 715/501.1, 744, 746, 738, 715/760, 804; 705/26

See application file for complete search history.

(57) **ABSTRACT**

An e-commerce outsourcing system and method provides hosts with transparent, context-sensitive e-commerce supported pages. The look and feel of a target host is captured for future use. The host is provided with one or more links for inclusion within a page on the host website that correlates with a selected commerce object, which may be contextually related to material in the page. The commerce object can be a product, a product category, or a dynamic selection indicator. Upon activation of the provided link, a visitor computer is served with a page with the look and feel of the host website and with content based upon the associated commerce object. Where the commerce object is a dynamic selection indicator, the content is selected at the time of activation based upon an analysis of the page containing the activated link.

**27 Claims, 24 Drawing Sheets**



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U.S. Patent

Jan. 31, 2006

Sheet 1 of 24

US 6,993,572 B2

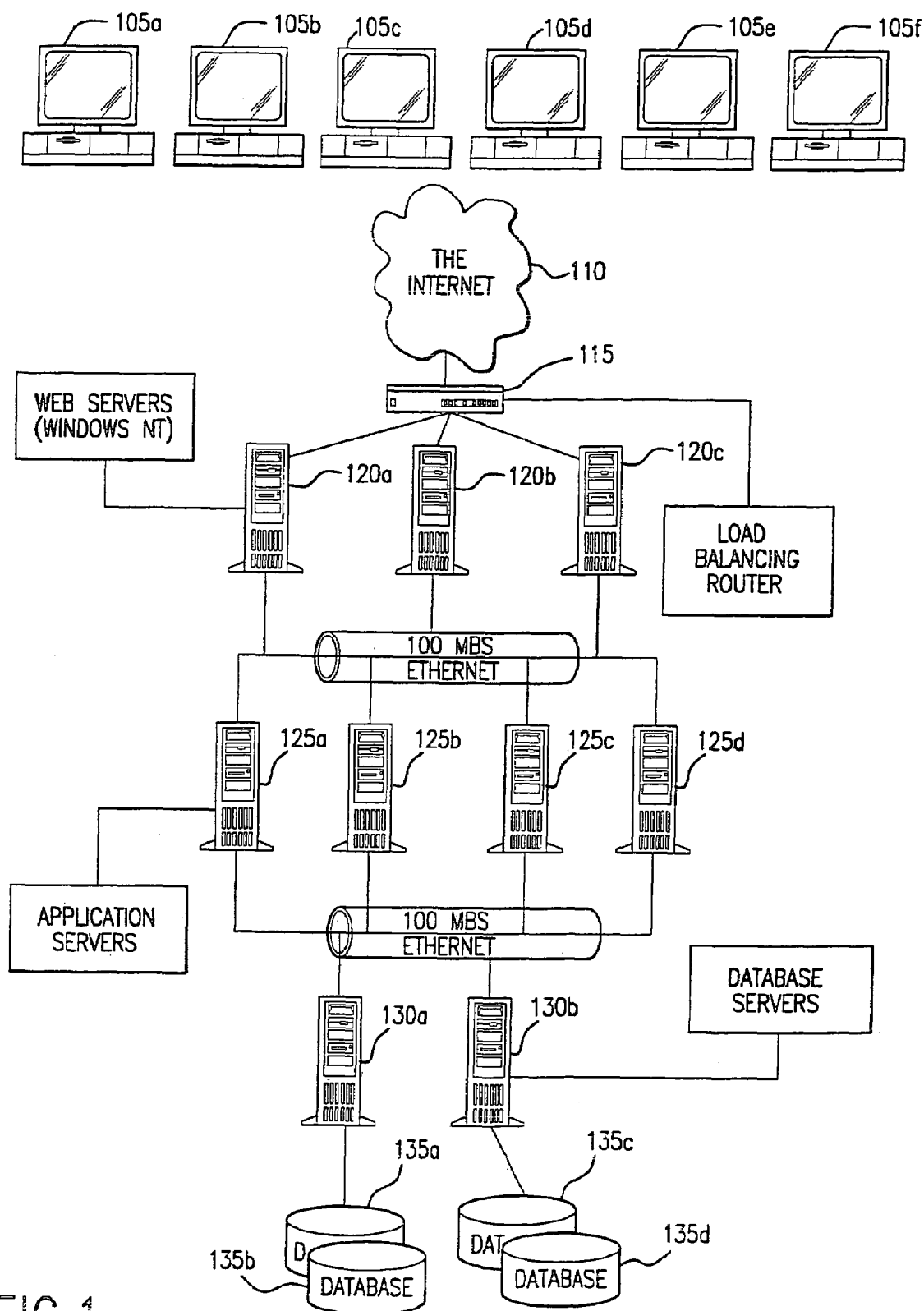


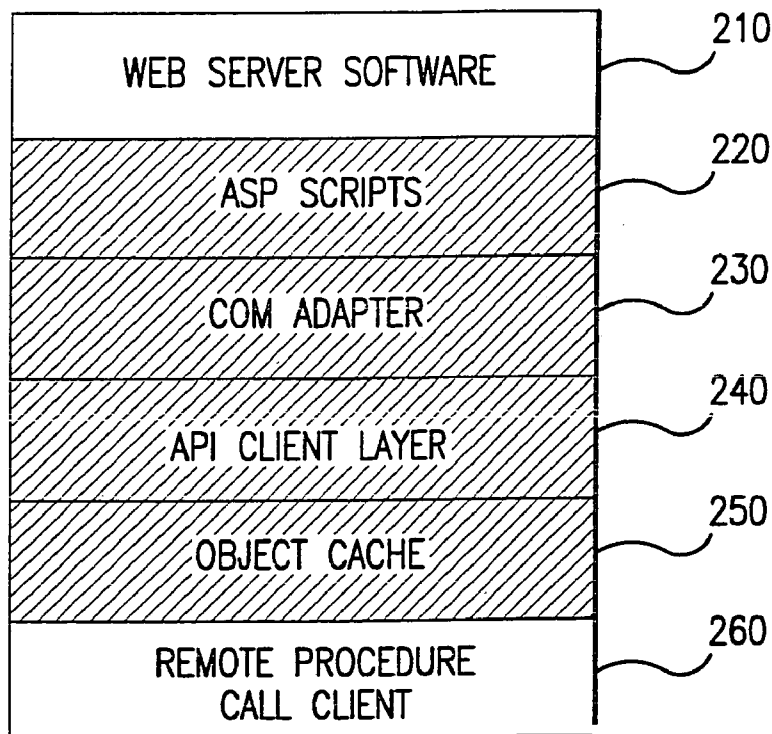
FIG. 1

**U.S. Patent**

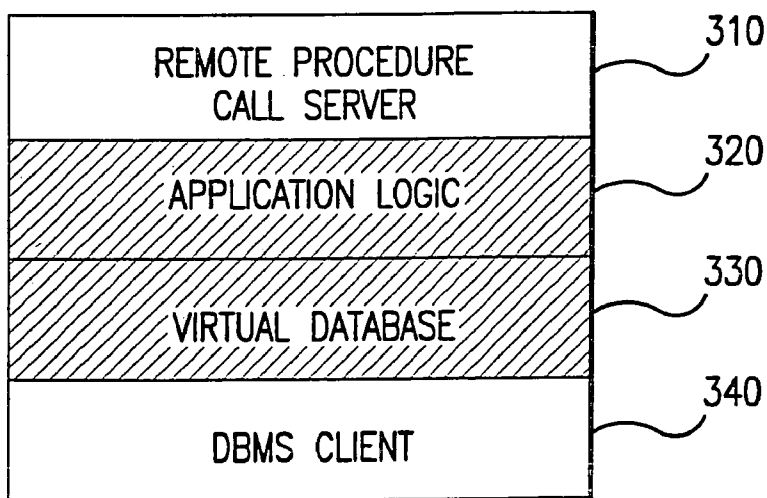
Jan. 31, 2006

Sheet 2 of 24

**US 6,993,572 B2**



**FIG. 2**



**FIG. 3**

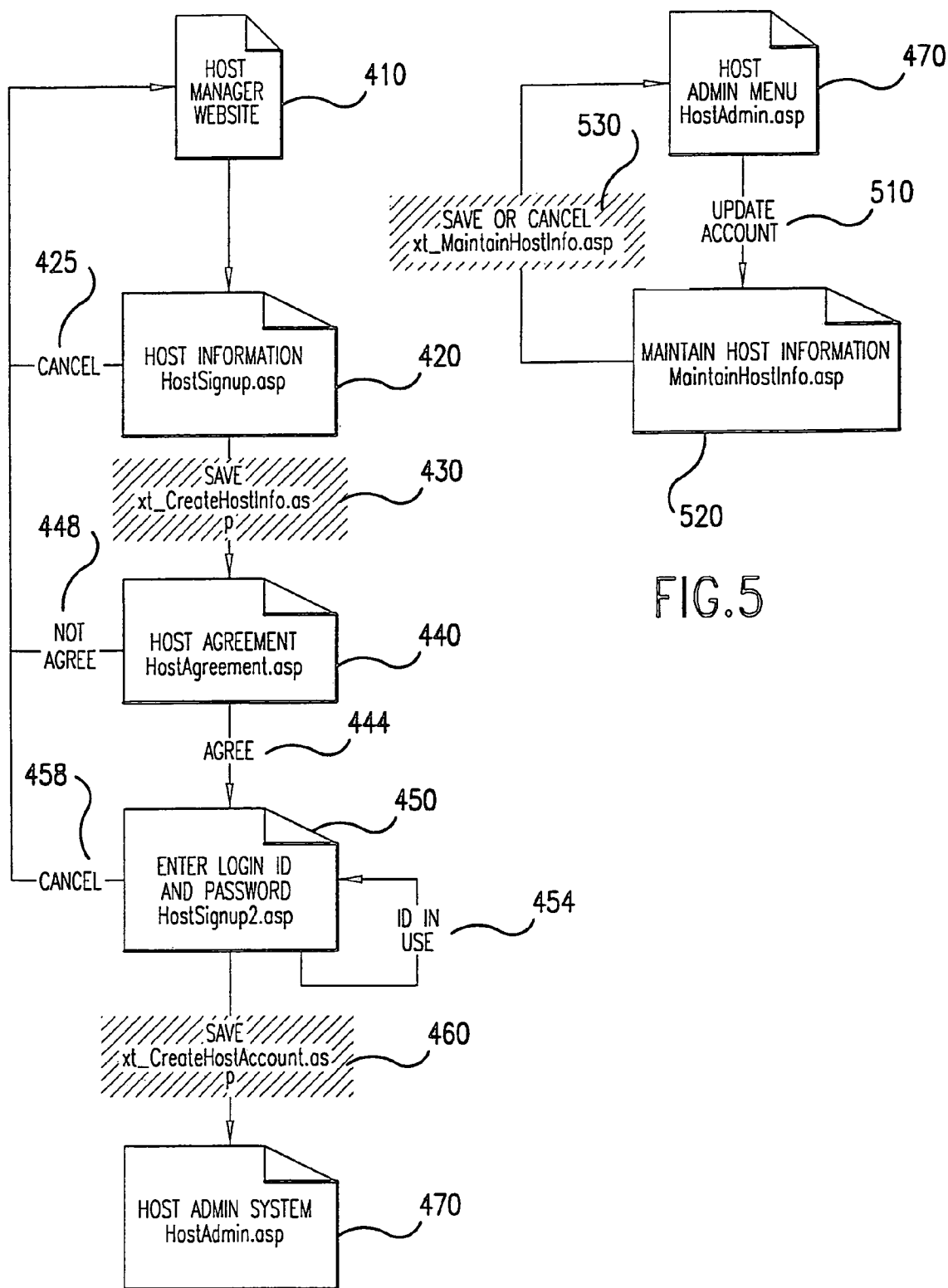


FIG.5

FIG.4



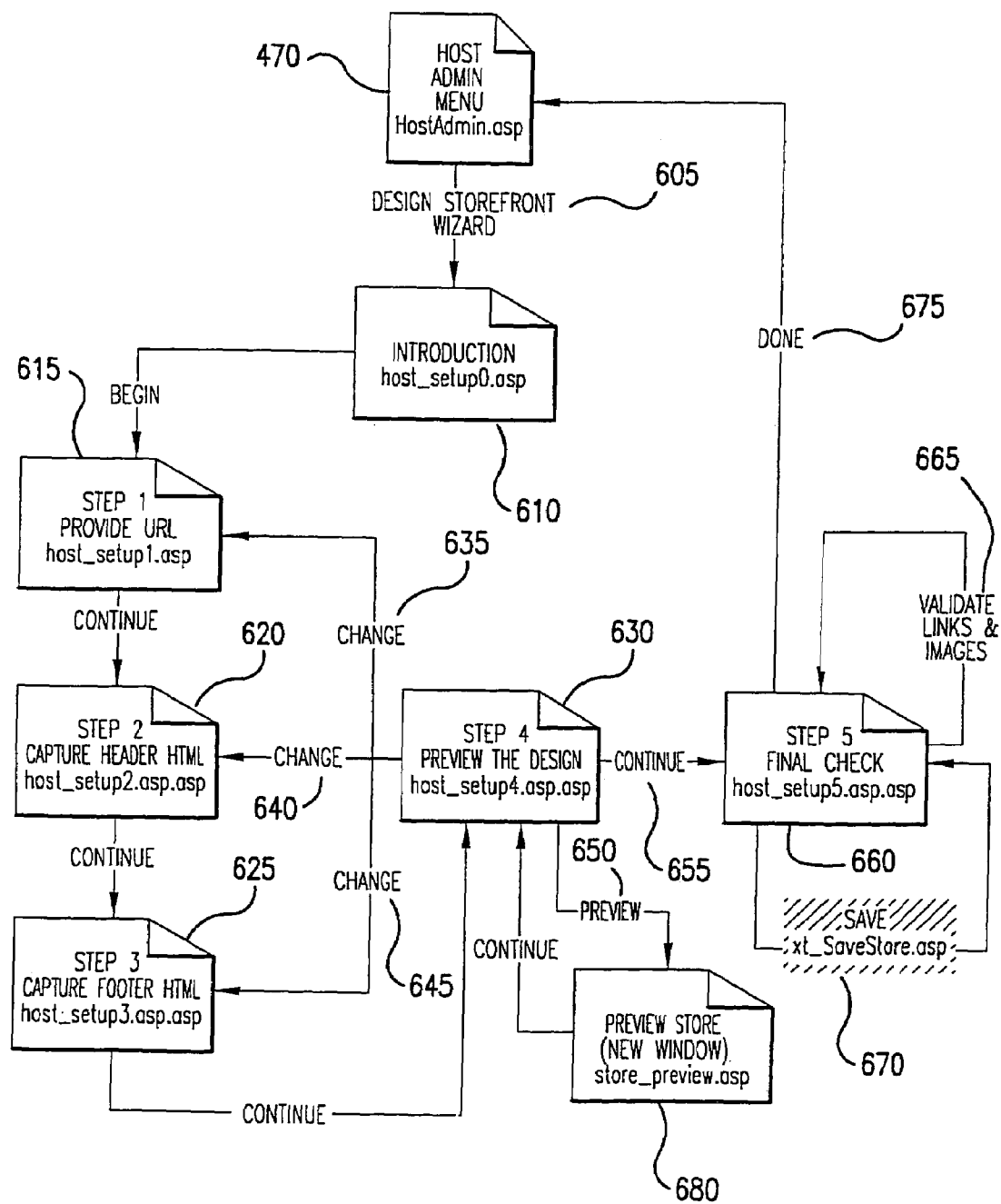


FIG.6



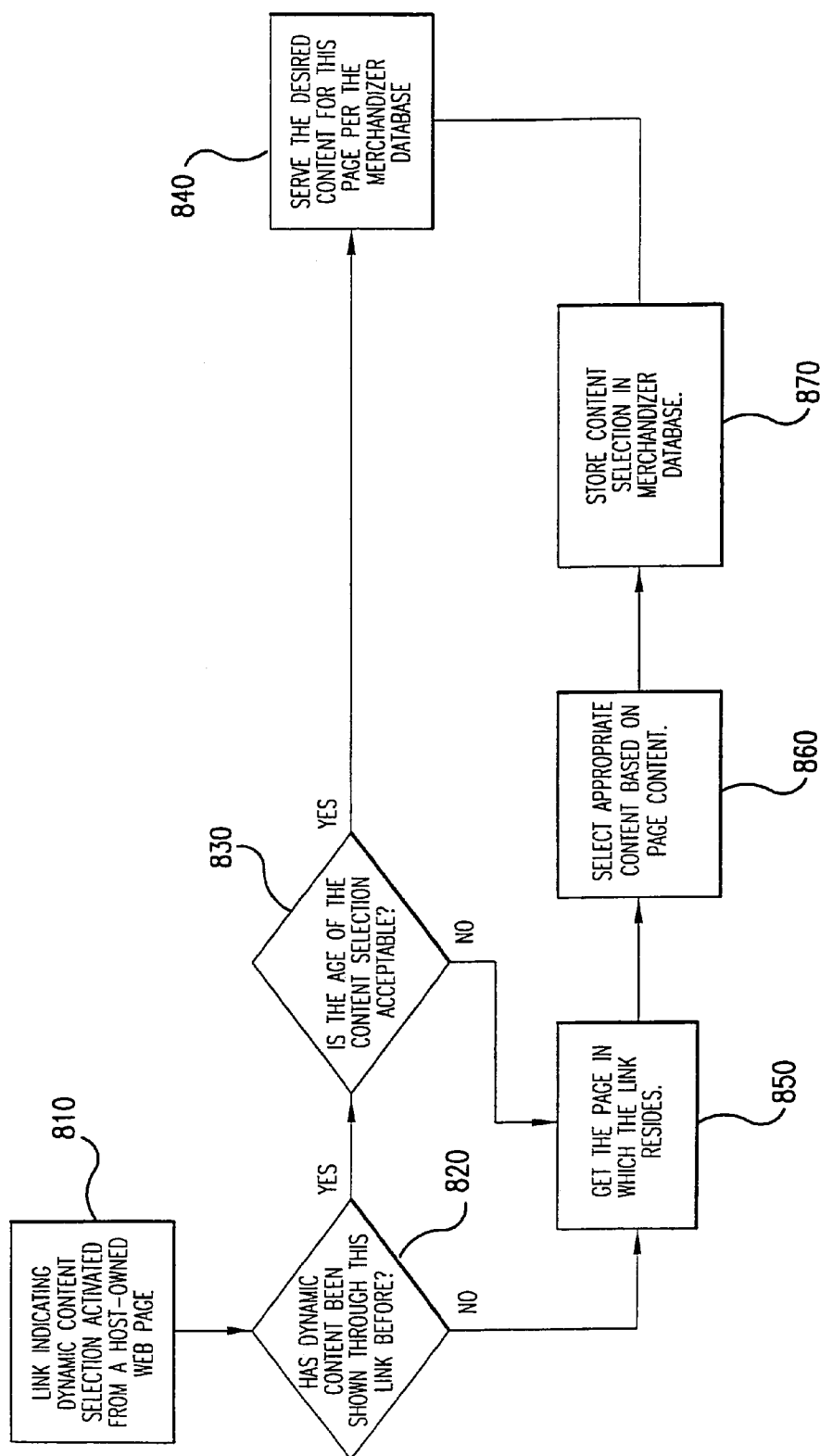


FIG. 8

U.S. Patent

Jan. 31, 2006

Sheet 7 of 24

US 6,993,572 B2

**NEXCHANGE-MERCHANT MANAGER-UPDATE ACCOUNT-MICROSOFT INTERNET EXPLORER**

FILE EDIT VIEW FAVORITES TOOLS HELP

BACK FORWARD STOP REFRESH HOME

SEARCH FAVORITES HISTORY MAIL PRINT

ADDRESS <http://216.0.58.3/MerchantAdmin/Admin.asp?MerchantSID=88661467> GO! LINKS >>

**nextchange™**

**justforfeet**

WORLD'S LARGEST ATHLETIC SHOE STORE

WHERE THE 13th PAIR IS FREE

JUST FOR FEET

**MERCHANT MANAGER**

MAIN

MANAGE ORDERS EDIT PRODUCT/CATALOG GENERATE REPORTS REVIEW HOSTS UPDATE ACCOUNT CONTACT US

QUICK SUMMARY OF RESULTS

SALES TO DATE: \$0.00

SALES THIS MONTH: \$0.00

QUICK REPORT: THIS MONTH GO!

SALES ARE GROSS SALES AND DO NOT INCLUDE ADJUSTMENTS

NEXCHANGE NEWS

ANNOUNCEMENTS

YOU HAVE 0 NEW ORDERS

YOU HAVE 0 ORDERS TO SHIP

YOU HAVE 0 RETURNS TO PROCESS

NUMBER OF HOSTS IN NETWORK: 0

NUMBER OF BUYING 'LINKS': 0

NEXCHANGE GOES THE EXTRA MILE AND MANAGES EVERY ASPECT OF YOUR AFFILIATE PROGRAM—FROM RECRUITING AFFILIATE WEBSITES AND GIVING THEM TOOLS THEY NEED TO SELL ALL THE WAY THROUGH PAYING THEM MONTHLY SALES COMMISSIONS. WE KEEP IT SIMPLE. YOU PRODUCE GREAT PRODUCTS. WE SELL THEM ALL ACROSS THE INTERNET.

NEXCHANGE GIVES YOU CONTROL.

YOU CHOOSE THE PRODUCT MIX, SET PRICES, AND DESIGN THE ONLINE CATALOG. YOU REACH NEW CUSTOMERS WITHOUT THE TRADITIONAL COSTS OF SALES. NEXCHANGE ONLY EARNS MONEY WHEN WE SELL YOUR PRODUCTS SUCCESSFULLY.

INTERNET

FIG. 9

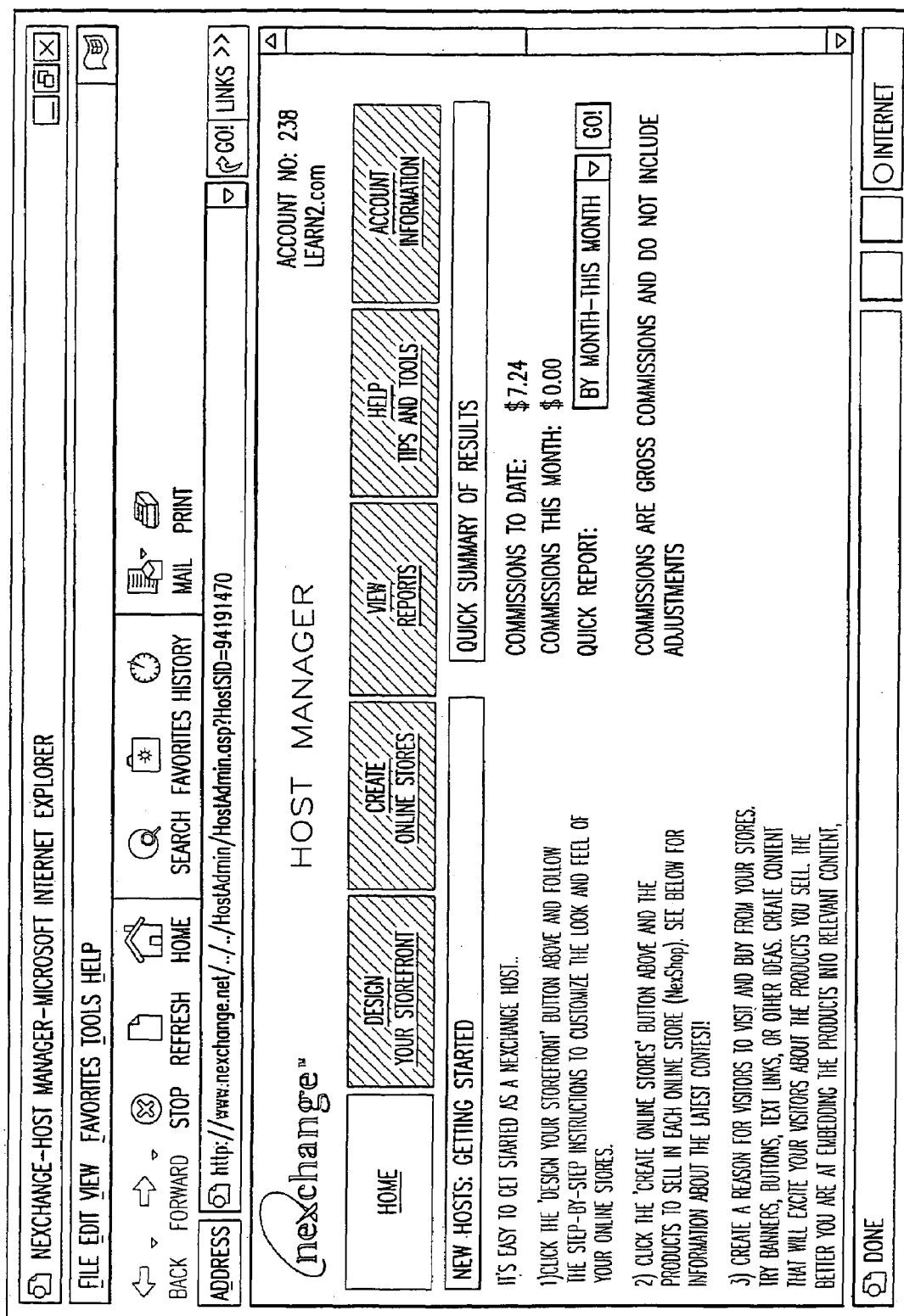


FIG. 10

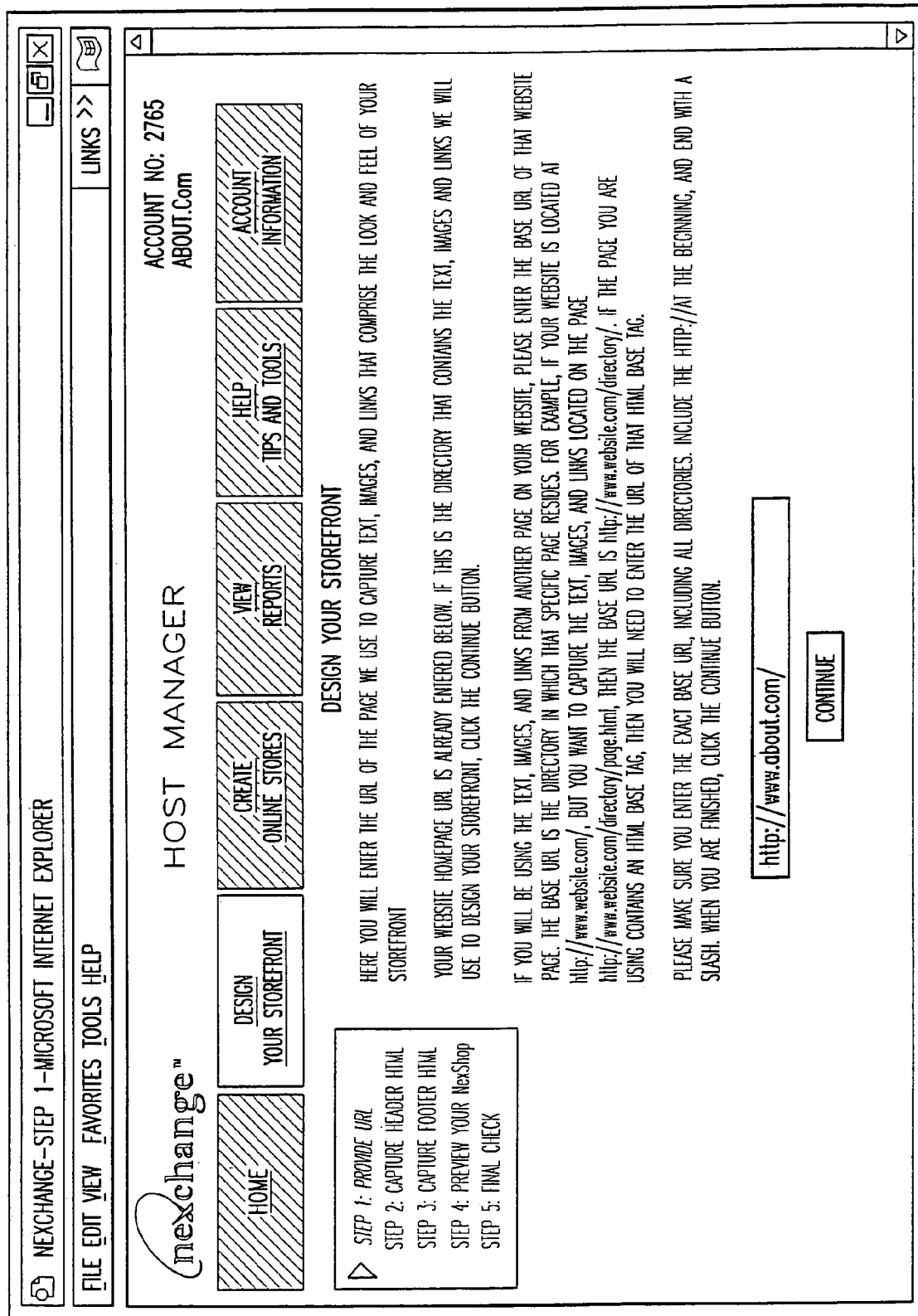


FIG. 11

U.S. Patent

Jan. 31, 2006

Sheet 10 of 24

US 6,993,572 B2

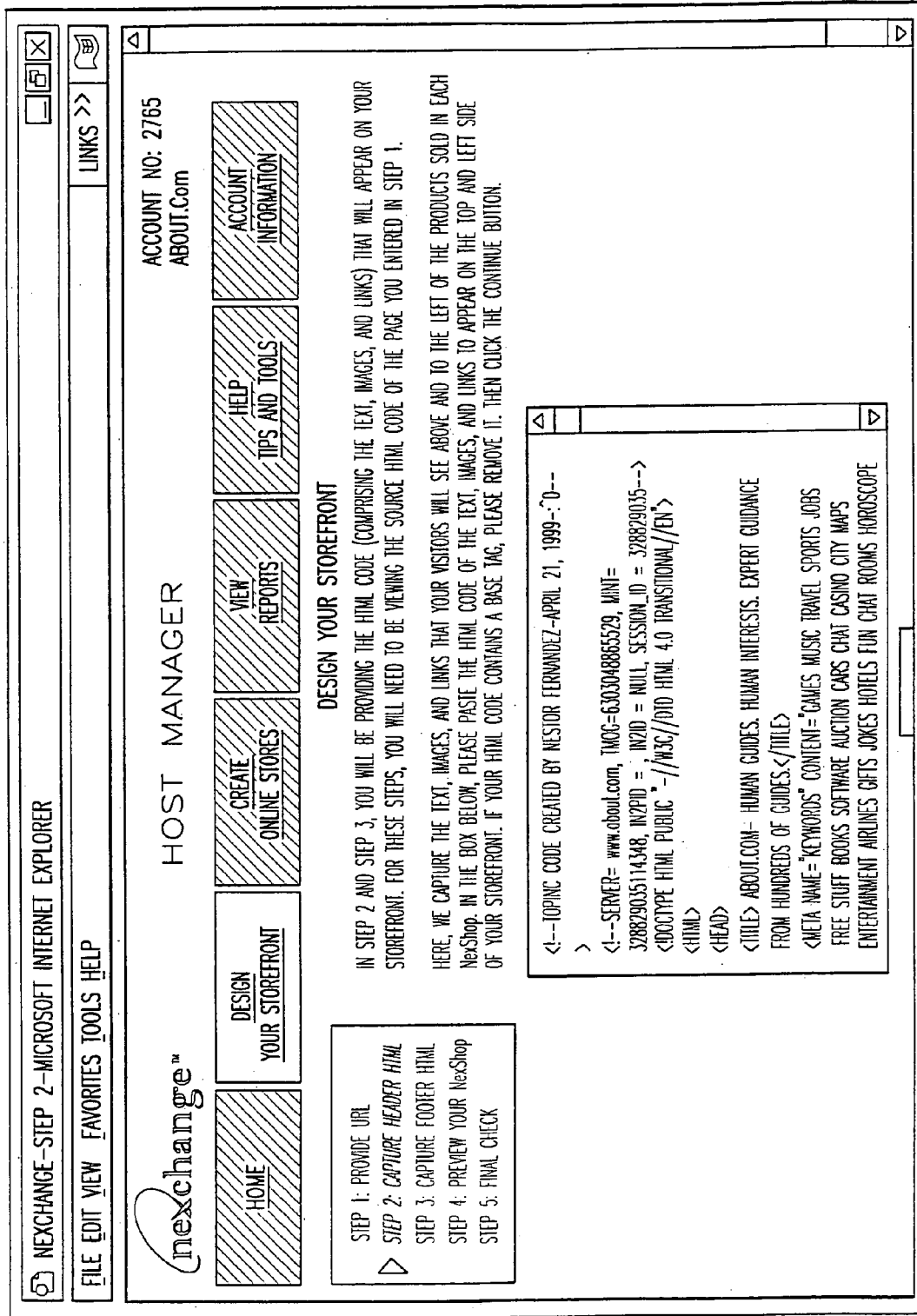


FIG. 12

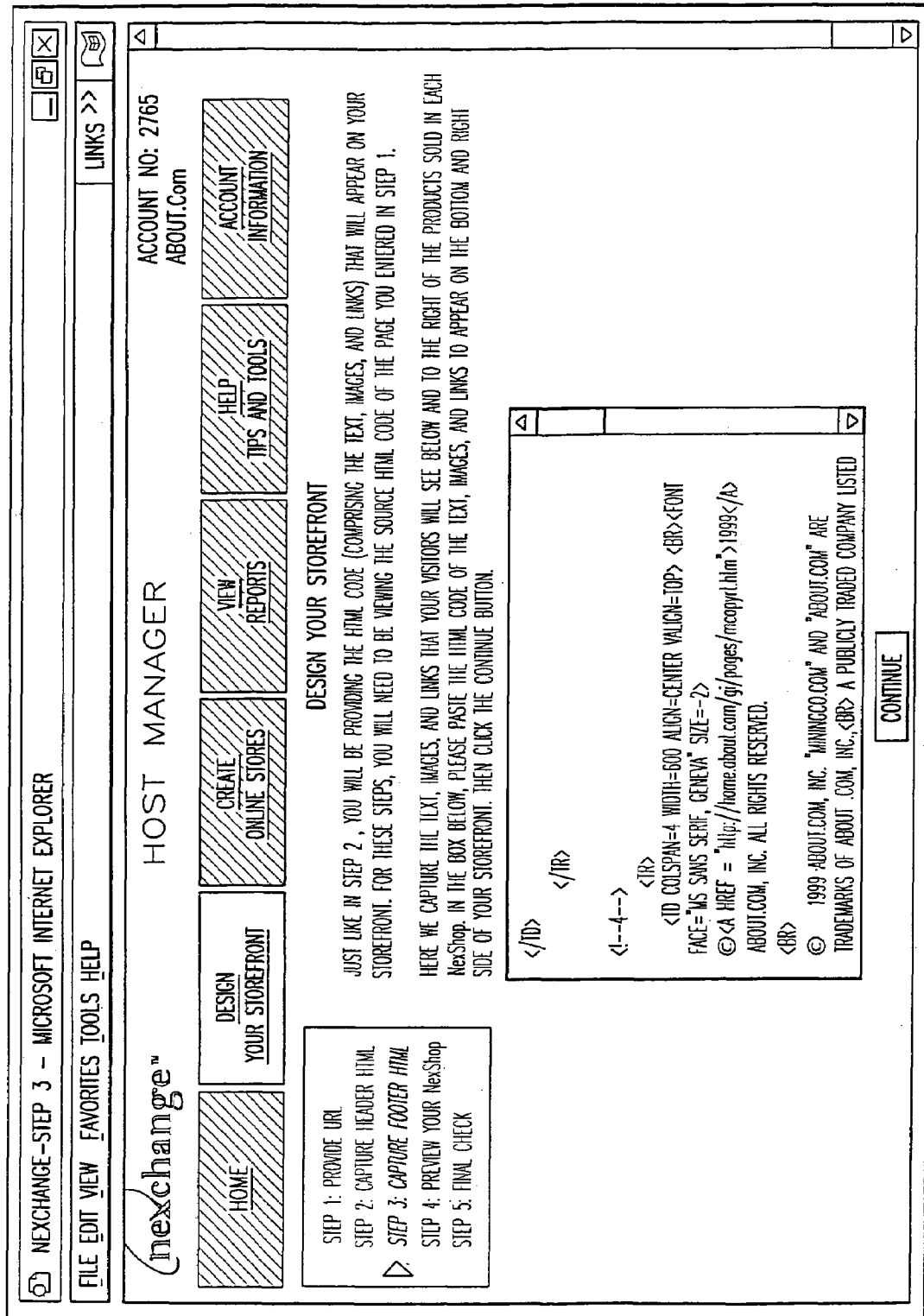


FIG. 13



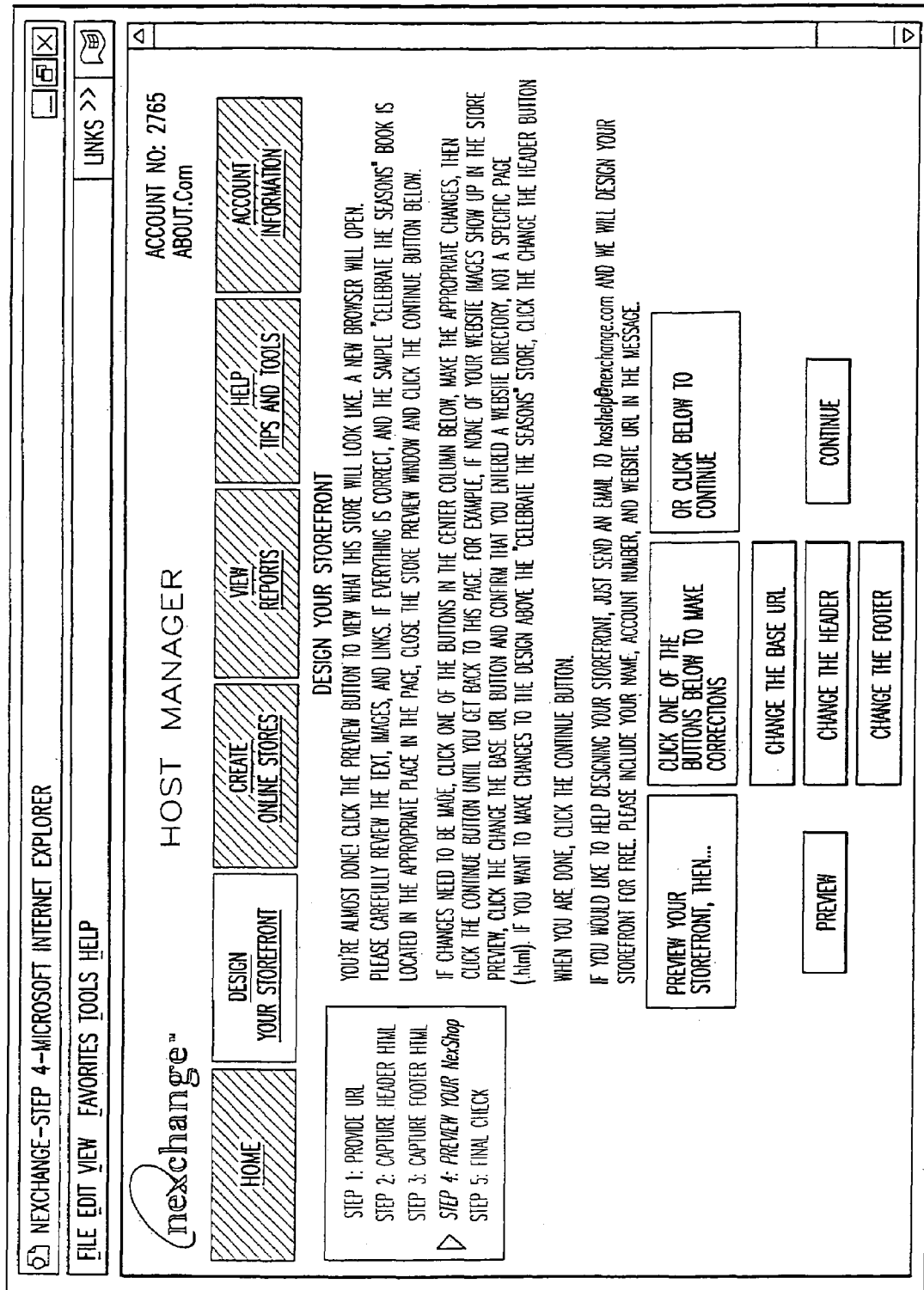


FIG. 14

U.S. Patent

Jan. 31, 2006

Sheet 13 of 24

US 6,993,572 B2

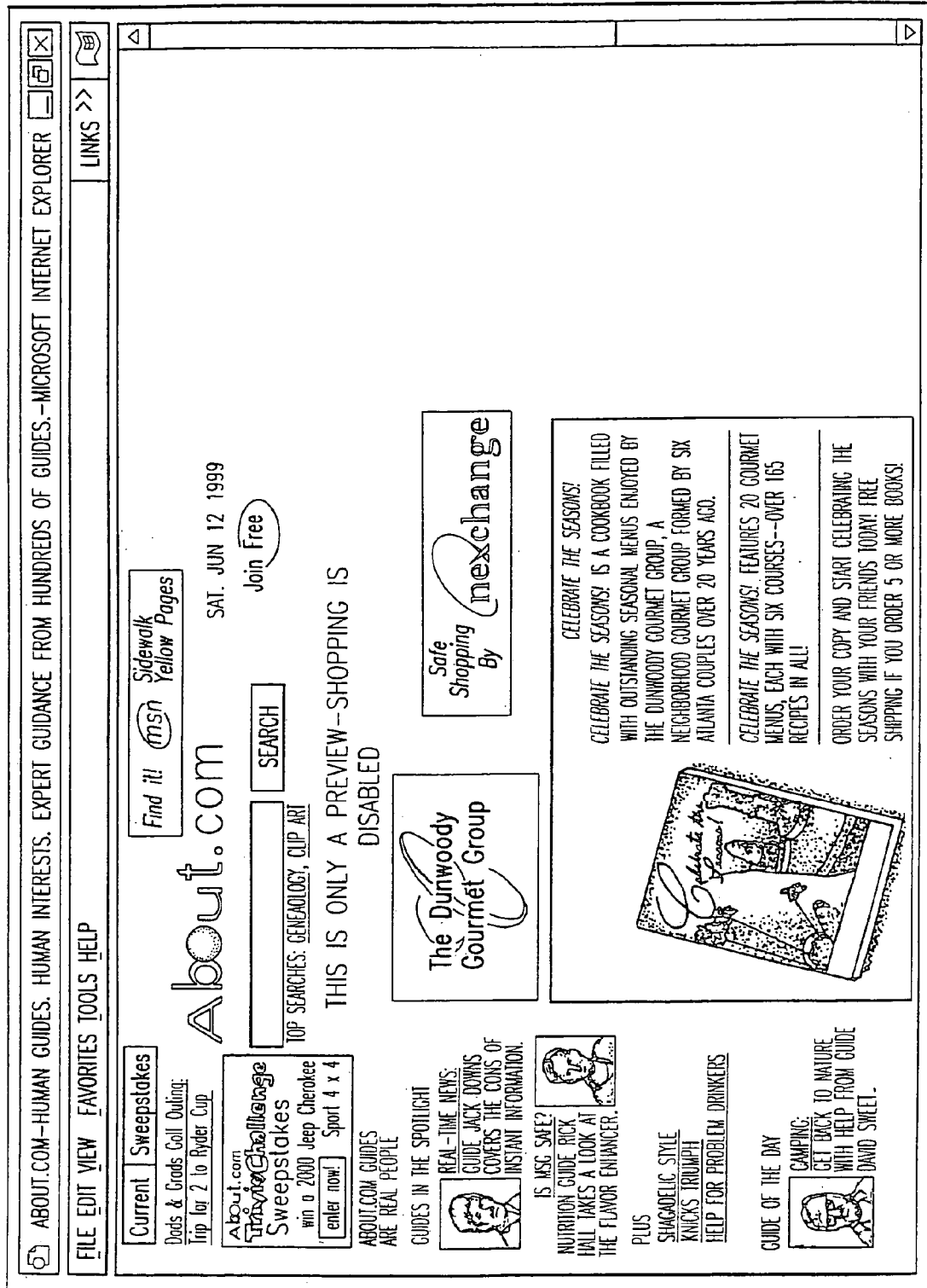


FIG. 15

**NEXCHANGE-STEP 5-MICROSOFT INTERNET EXPLORER**

FILE EDIT VIEW FAVORITES TOOLS HELP LINKS >>

**HOST MANAGER**

ACCOUNT NO: 2765  
ABOUT.Com

HOME DESIGN YOUR STOREFRONT CREATE ONLINE STORES VIEW REPORTS HELP TIPS AND TOOLS ACCOUNT INFORMATION

**DESIGN YOUR STOREFRONT**

IF YOU WOULD LIKE, THE HOST MANAGER SYSTEM WILL VALIDATE THE LINKS AND IMAGES IN YOUR STORE DESIGN. THIS WILL ENSURE THAT YOUR VISITORS WILL BE ABLE TO NAVIGATE WITHIN YOUR STORES AS EASILY AS THEY DO ON YOUR WEBSITE. WE RECOMMEND THAT YOU COMPLETE THIS FINAL STEP.


CLICK THE VALIDATE BUTTON AND THE HOST MANAGER WILL CONFIRM ALL OF THE IMAGES AND LINKS. IF IT FINDS PROBLEMS, THE SYSTEM WILL LIST THEM BELOW FOR YOU TO FIX.

WHEN YOU ARE FINISHED, OR IF YOU WANT TO SKIP THIS STEP, CLICK THE SAVE BUTTON.

☐ LINKS ONLY  
☐ IMAGES ONLY  
☒ LINKS AND IMAGES

STEP 1: PROVIDE URL  
 STEP 2: CAPTURE HEADER HTML  
 STEP 3: CAPTURE FOOTER HTML  
 STEP 4: PREVIEW YOUR NexShop  
 STEP 5: FINAL CHECK

FIG. 16


**HOST MANAGER**

ACCOUNT NO: 2765  
 ABOUT.Com

DESIGN YOUR STOREFRONT  
 DESIGN  
 YOUR STOREFRONT

CREATE  
 ONLINE STORES

VIEW  
 REPORTS

HELP  
 TIPS AND TOOLS

ACCOUNT  
 INFORMATION

STEP 1: PROVIDE URL  
 STEP 2: CAPTURE HEADER HTML  
 STEP 3: CAPTURE FOOTER HTML  
 STEP 4: PREVIEW YOUR NexShop  
 STEP 5: FINAL CHECK

IF YOU WOULD LIKE, THE HOST MANAGER SYSTEM WILL VALIDATE THE LINKS AND IMAGES IN YOUR STORE DESIGN. THIS WILL ENSURE THAT YOUR VISITORS WILL BE ABLE TO NAVIGATE WITHIN YOUR STORES AS EASILY AS THEY DO ON YOUR WEBSITE. WE RECOMMEND THAT YOU COMPLETE THIS FINAL STEP.

CLICK THE VALIDATE BUTTON AND THE HOST MANAGER WILL CONFIRM ALL OF THE IMAGES AND LINKS. IF IT FINDS PROBLEMS, THE SYSTEM WILL LIST THEM BELOW FOR YOU TO FIX.

WHEN YOU ARE FINISHED, OR IF YOU WANT TO SKIP THIS STEP, CLICK THE SAVE BUTTON.

IMAGE VALIDATION STATUS      LINK VALIDATION STATUS

VERIFYING IMAGE: 011      VERIFYING LINK: 028

VALID: 011      VALID: 028

INVALID: 000      INVALID: 000

VALIDATE      SAVE

☐ LINKS ONLY  
☐ IMAGES ONLY  
☒ LINKS AND IMAGES

FIG.17

U.S. Patent

Jan. 31, 2006

Sheet 16 of 24

US 6,993,572 B2

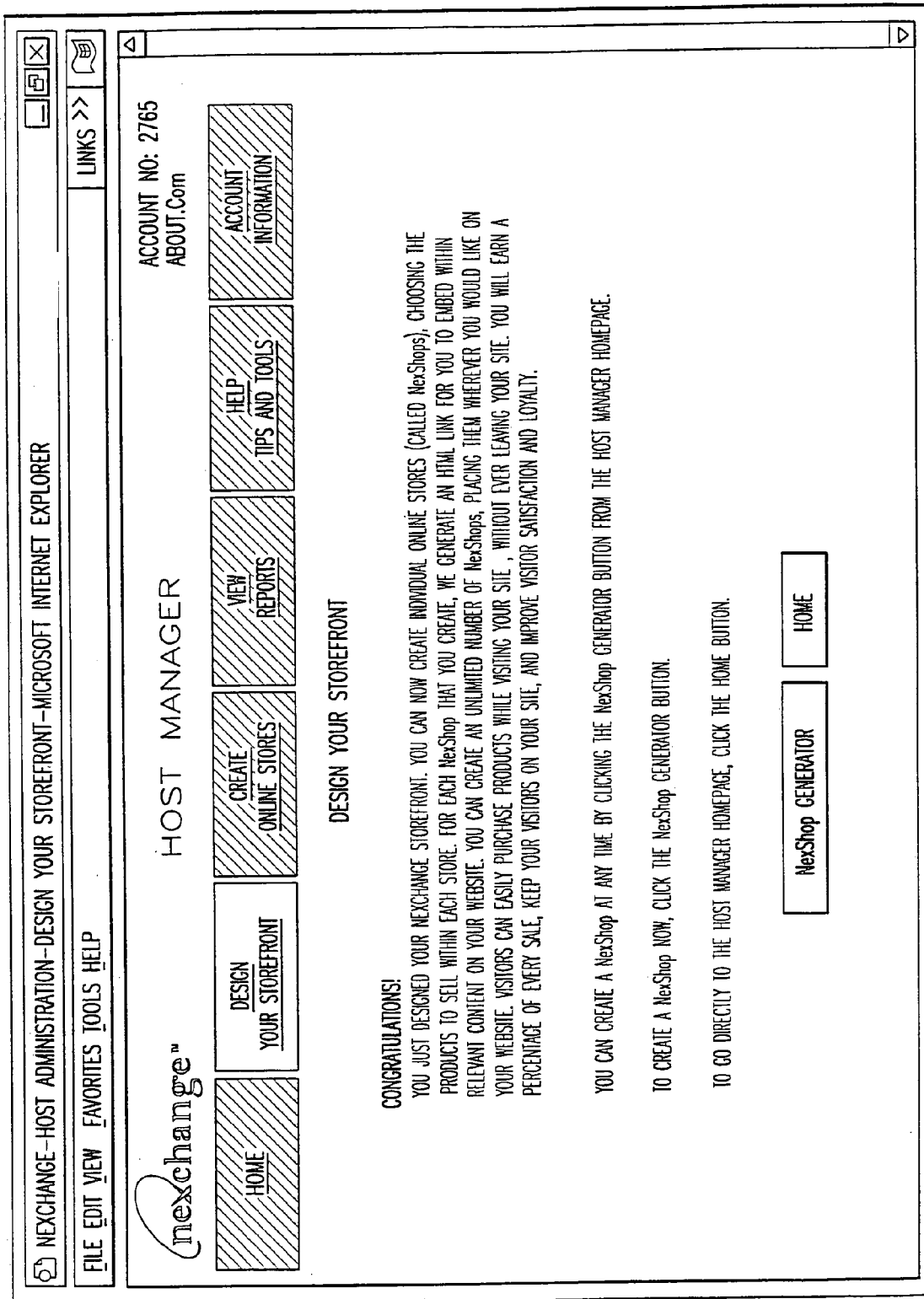


FIG. 18

U.S. Patent

Jan. 31, 2006

Sheet 17 of 24

US 6,993,572 B2

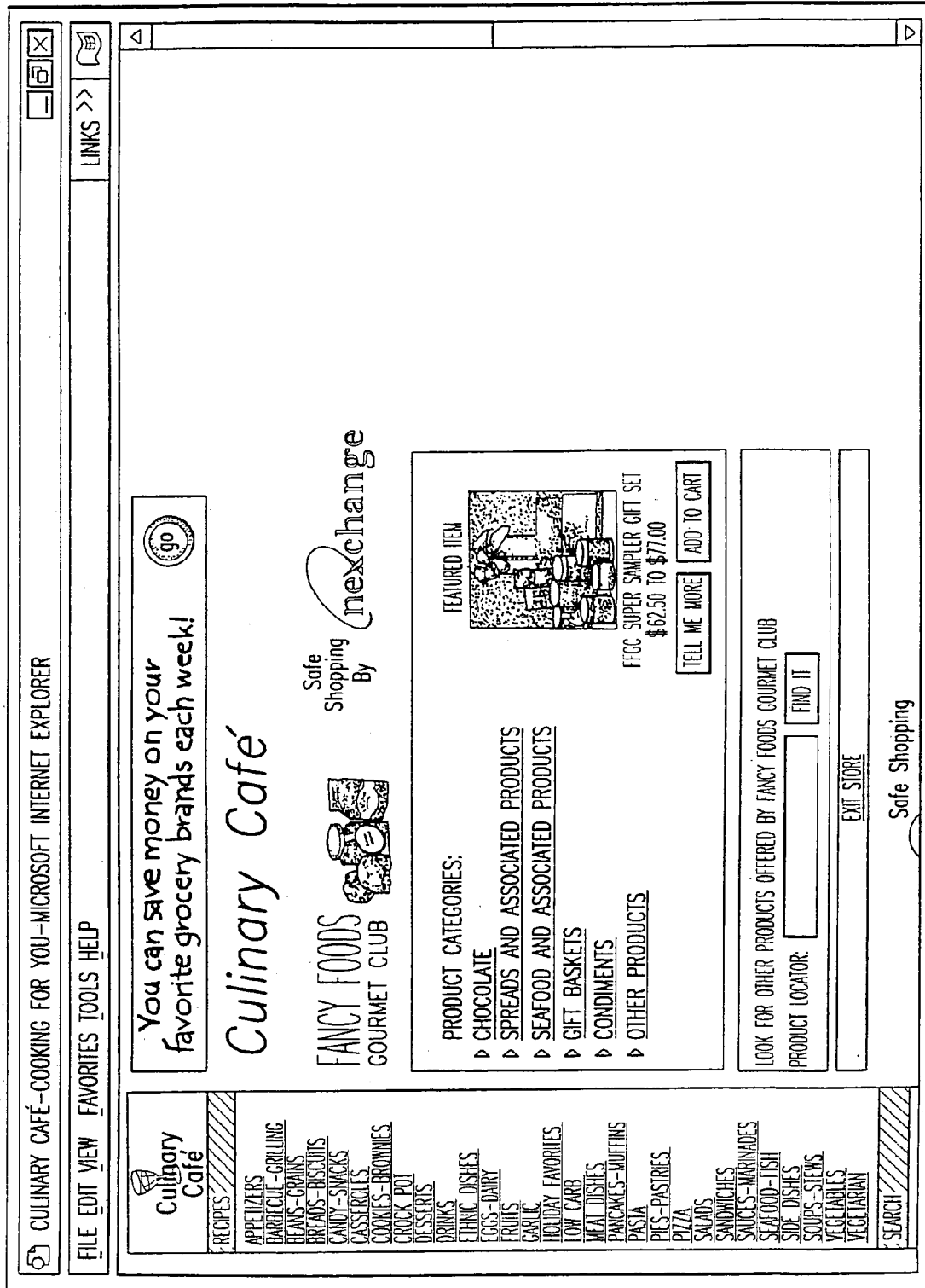


FIG. 19

U.S. Patent

Jan. 31, 2006

Sheet 18 of 24

US 6,993,572 B2

**NEXCHANGE-SYSTEM MANAGER-MAIN-MICROSOFT INTERNET EXPLORER**

FILE EDIT VIEW FAVORITES TOOLS HELP

BACK FORWARD STOP REFRESH HOME SEARCH FAVORITES HISTORY MAIL PRINT

ADDRESS <http://www.nexchange.net/NexchangeAdmin/NexchangeAdmin.asp?NexchangeSID=94191470> GO LINKS >>

**9/16/99 2:06:46 PM**

**SYSTEM MANAGER**

MAIN UTILITIES HOSTS MERCHANTS AGENTS FINANCE

**SHIPPING STATISTICS**

PENDING ORDERS: 1  
TOTAL SESSIONS: 361066  
TOTAL ORDERS: 349  
TOTAL SALES: \$23,370.09

**HOST STATISTICS**

TOTAL HOSTS: 6234  
PENDING: 6  
APPROVED: 5095  
DECLINED: 1133  
TOTAL COMMISSIONS: \$3,235.60

**MERCHANT STATISTICS**

MERCHANTS: 17  
HOST RELATIONSHIPS: 10761  
LINKS: 22713  
REVENUE: \$16,188.74

**RETURNS**

NEW: 3  
CANCELED: 2  
RETURNED: 4

**UNTENDED ORDERS**

GATEWAY LEARNING CORPORATION	1512	9/12/99 3:07:36 PM	OK
MPG MARKETING, INC.	1468	9/2/99 5:08:19 PM	OK
MPG MARKETING, INC.	1469	9/2/99 6:29:06 PM	OK
MPG MARKETING, INC.	1478	9/4/99 4:48:16 PM	OK
MPG MARKETING, INC.	1480	9/4/99 8:32:31 PM	OK
MPG MARKETING, INC.	1482	9/5/99 11:31:36 AM	OK
MPG MARKETING, INC.	1486	9/7/99 10:16:18 AM	OK
MPG MARKETING, INC.	1501	9/9/99 11:56:57 PM	OK
MPG MARKETING, INC.	1507	9/11/99 9:24:40 PM	OK
MPG MARKETING, INC.	1509	9/12/99 9:10:56 AM	OK

**INTERNET**

**DONE**

FIG. 20

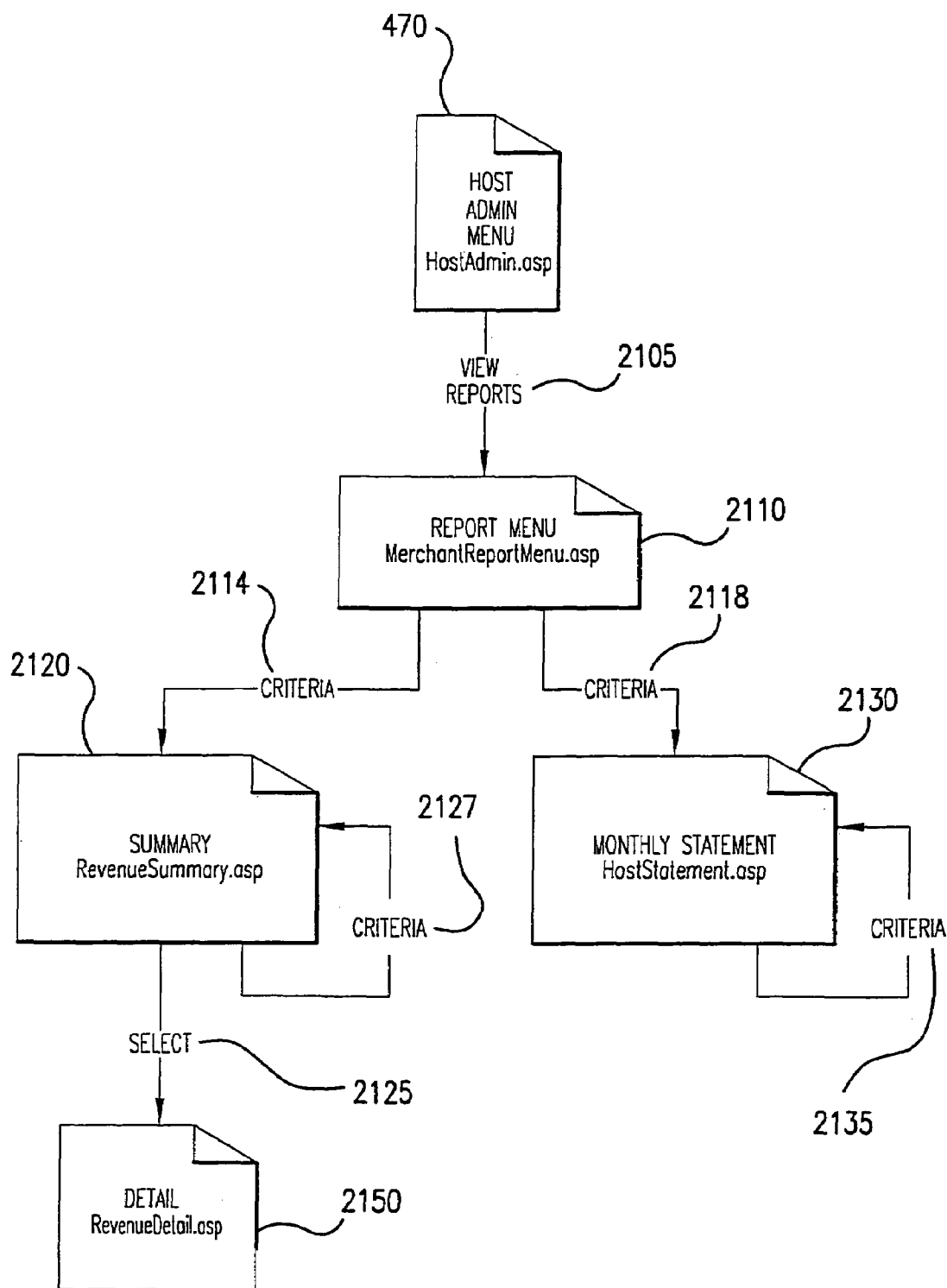


FIG. 21





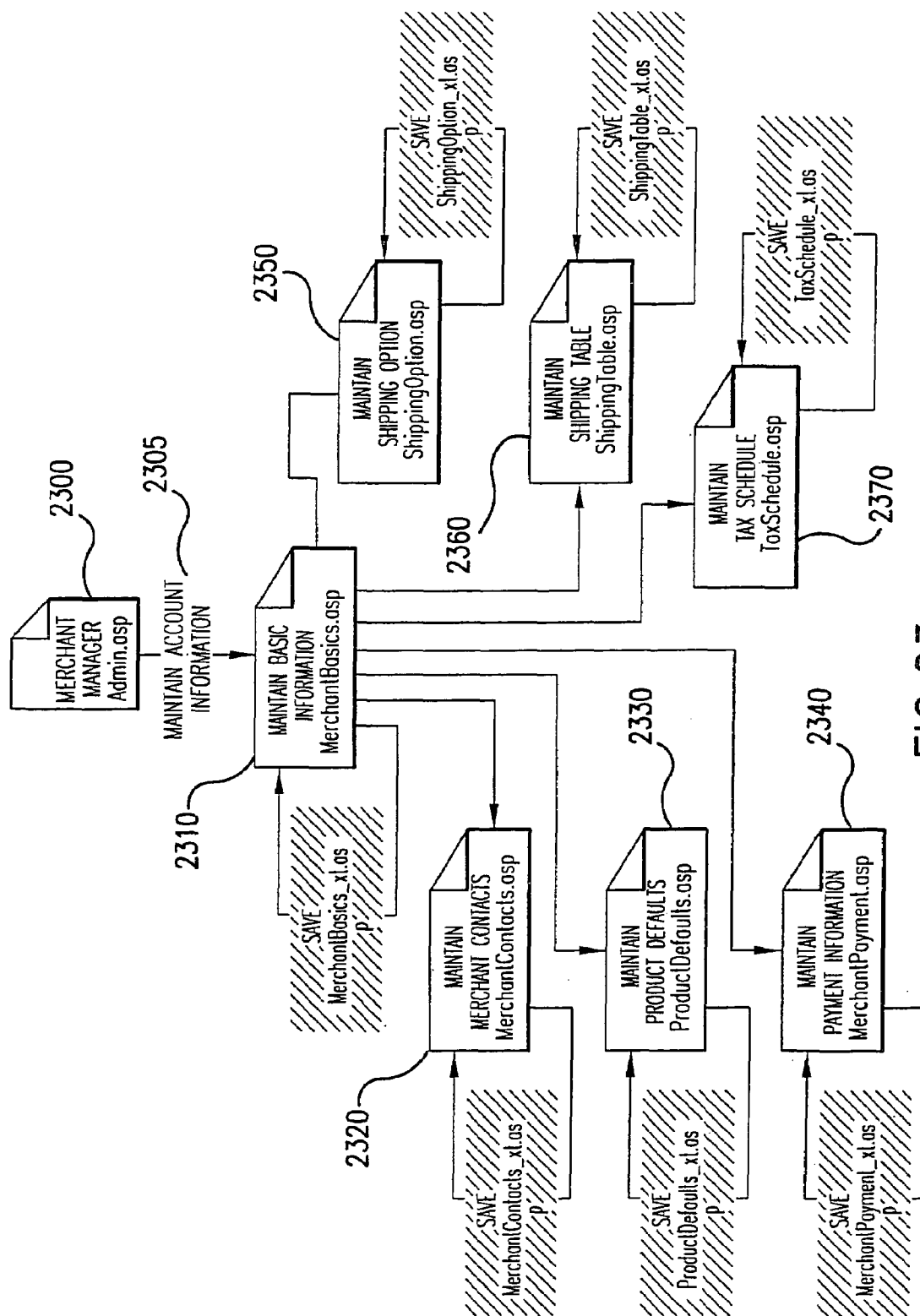
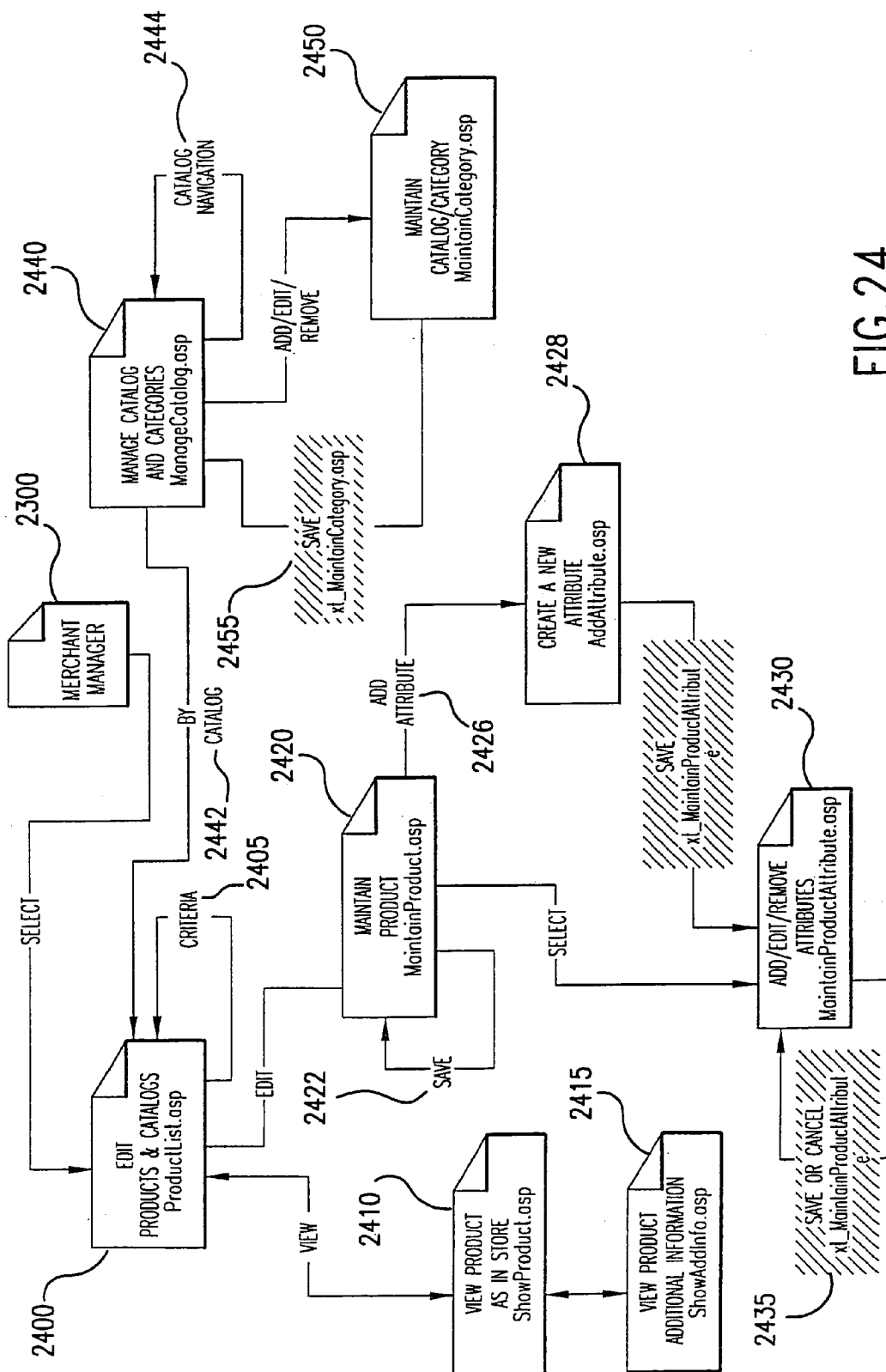


FIG. 23



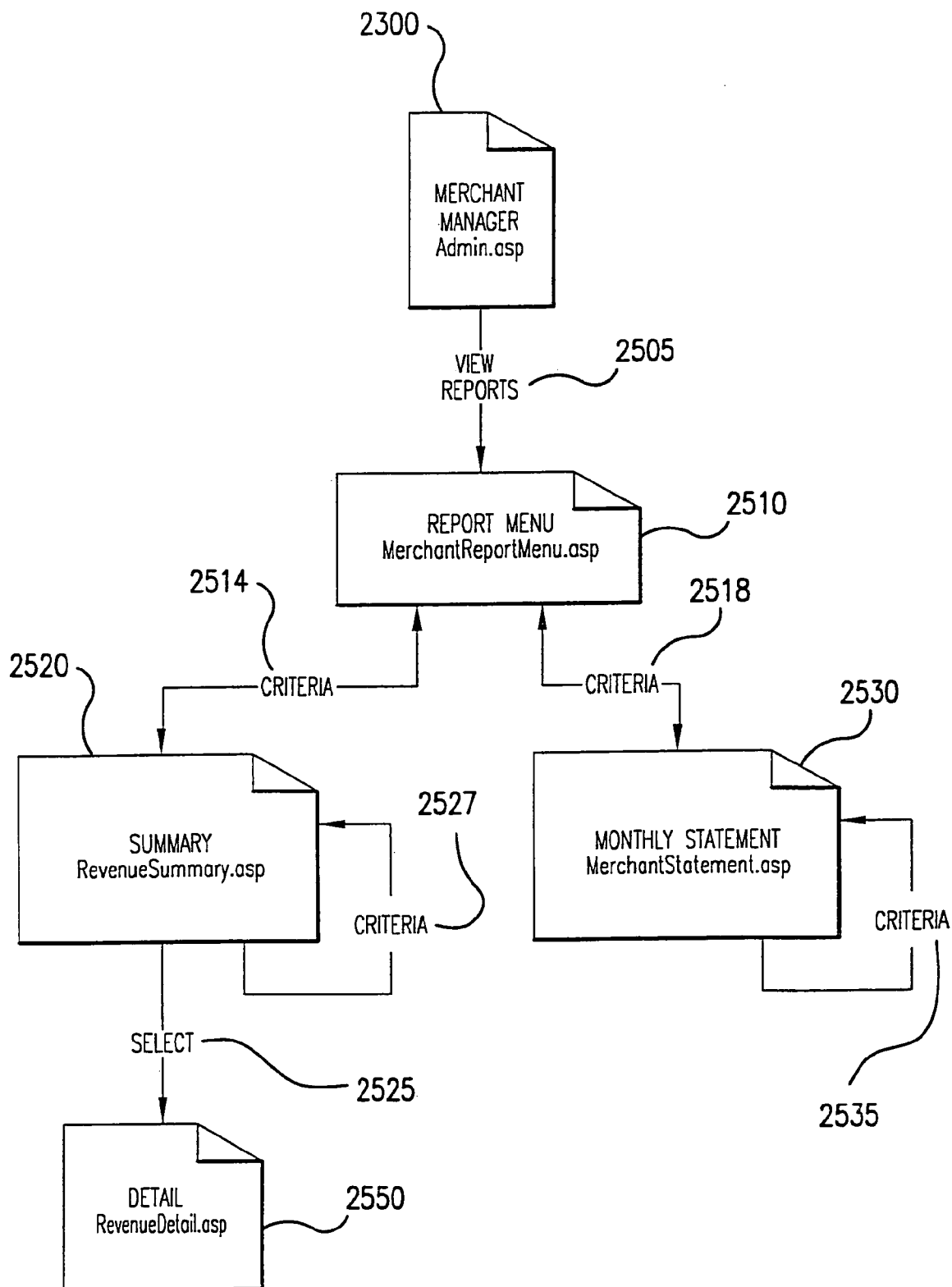


FIG.25

U.S. Patent

Jan. 31, 2006

Sheet 24 of 24

US 6,993,572 B2

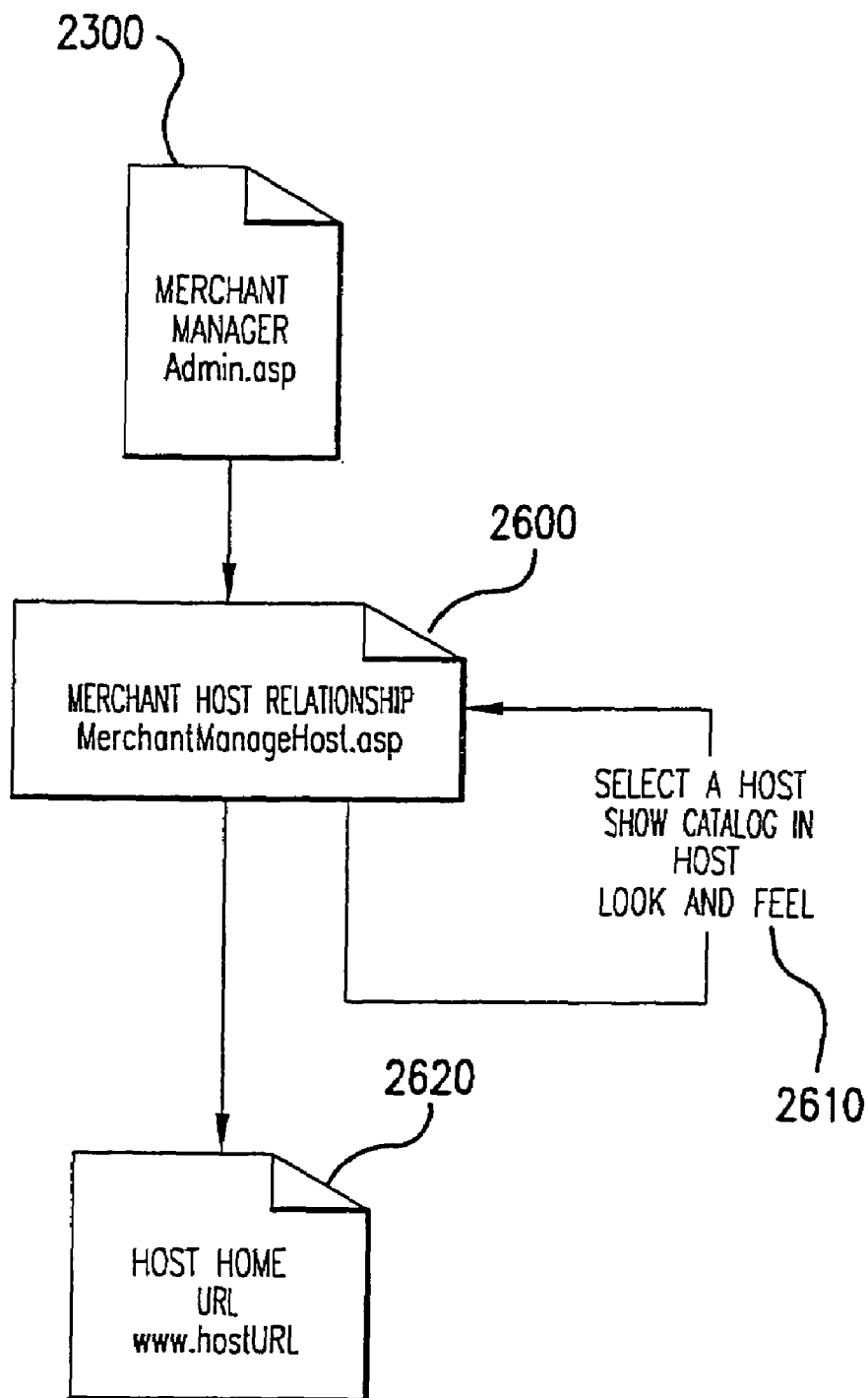


FIG.26

US 6,993,572 B2

1

# SYSTEM AND METHOD FOR FACILITATING INTERNET COMMERCE WITH OUTSOURCED WEBSITES

## CROSS-REFERENCE TO RELATED APPLICATIONS

This is a continuation of application Ser. No. 09/398,268, filed Sep. 17, 1999, now U.S. Pat. No. 6,629,135, which claims the benefit of application Ser. No. 60/100,697, filed Sep. 17, 1998, which applications are hereby incorporated by reference.

## BACKGROUND OF INVENTION

### 1. Field of Invention

The invention relates to a system and method supporting commerce syndication. More specifically, the invention relates to a system and method for computer based information providers to receive outsourced electronic commerce facilities in a context sensitive, transparent manner.

### 2. Description of Prior Art

The World Wide Web began as a simple interface to the Internet using HTML (hypertext markup language) as a means of linking documents together. This allowed a researcher, for example, to embed "active" references in his or her documents that, if selected, would enable the reader to review the source of the reference first-hand. Programmers quickly capitalized on this technology, creating "web sites" which reflected less staid purposes, laying the groundwork for the literal "web" of content and interactive applications that exists today. In the early stages, website programmers increased visitor traffic by placing "links" within their websites to other websites, usually related in content or function, in exchange for a reciprocal link. Additionally, directories of websites, such as Yahoo, and search engines, such as WebCrawler, began to appear in an attempt to organize the content of the Internet so that its users could create "custom links pages" related to specific topics.

In these early days, the Web was mostly trafficked by programmers and "techies," and a commune-type "share and share alike" mindset prevailed. As a result, people were happy to litter their sites with links, knowing that, odds were, others would do the same for them and the traffic gain/loss would probably balance out. So, despite the fact that by including and promoting a "links" page, website operators were effectively encouraging people to leave their website, link sharing developed into a standard practice.

Then, entrepreneurs and other business-oriented individuals came along and introduced capitalism to the Internet. Profit-oriented website operators began to seek visitors wherever they could find them, and opportunistic owners of popular sites began to realize that they had an increasingly scarce resource—visitors. Such website owners began to sell the links they had previously offered for free in the form of paid advertisements. Search engines and directories became increasingly popular for two main reasons. First, the number of websites was growing astronomically, so it was becoming harder for users to find what they wanted. Second, since reciprocal links were either going away or were being replaced by links exclusively to non-competing websites, search engines and directories were the only way to find multiple resources for a single topic.

Amid frantic efforts on the part of corporate websites to get noticed, the sale of banner ads blossomed into a large industry called Internet advertising. Thousands of websites created space for banner ads and called the space "inven-

2

tory." At first, they priced ads as a print ad might be priced: by CPM, or cost per thousand "impressions" each ad made on website visitors. Over time this pricing model gave way to arrangements more favorable to advertisers such as Cost Per Click-through and Cost Per Inquiry (meaning the advertiser only needs to pay when a visitor sees a banner ad and clicks on it and completes an information request form on the advertiser's site).

Some of the most successful Internet commerce websites, led by online bookseller Amazon.com, have begun to take an even more results-driven approach to the purchase of banner ads. They have offered to pay only for ads that, when clicked, result in a product sale. To provide a stronger incentive than a simple banner ad, these companies let third-party website owners list a subset of their goods (e.g., 10 of Amazon.com's millions of books, selected by the website owner) and promote them as they choose within their websites. Initiatives such as these have come to be described as "affiliate programs", "associate programs" or "commission based advertising programs".

The benefits of affiliate programs are significant. To the website owner, they constitute revenue-generating web content without requiring an investment in product inventory or additional infrastructure. They also create new revenues without necessarily reducing the website's available ad inventory. However, the greater benefit almost always accrues not to the affiliate, but to Amazon.com and other online stores. Not only do these sites benefit from the marketing resources of the affiliate operators, they are also able to lure the visitor traffic away from the affiliate. Once a visitor clicks on an affiliate ad and enters an online store, that visitor has left the affiliate's site and is gone. At best, affiliates are able to use "frames" to keep a shell of their own website around the vendor's site, but this is only a marginally effective solution. No alternatives have been able to address a fundamental drawback of the affiliate programs—the loss of the visitor to the vendor. At best, some Internet affiliate sales vendors have begun placing "return to referring website" links on their order confirmation screens, an approach that is largely ineffective. This limitation of an affiliate program restricts participation to less trafficked websites that are unconcerned about losing visitors. Meanwhile, search engines and directories continue to increase in their usefulness and popularity, while banner ads and old-style links continue their rapid loss of effectiveness and popular usage.

The present invention overcomes these limitation of present affiliate commerce systems and provides other benefits as will become clearer to those skilled in the art from the foregoing description.

## SUMMARY OF THE INVENTION

The affiliate commerce system and method of the present invention represents a new paradigm of co-marketing on the Internet. Not only does the present invention provide its Hosts with the added value and incremental revenues of traditional affiliate programs, but the company also enables Hosts to control the customer experience before, during, and after the purchase transaction. At the same time, Merchants receive the same benefits as with older affiliate programs, i.e., increased marketing potential, incremental sales, and new customer relationships, but without the restrictive limitations of affiliate programs—the loss of hard-won visitor traffic.

Additionally, the present invention can actually obviate the need for some merchants to invest in their own unique

FIG. 2 illustrates the software architecture of the Web server layer.

FIG. 26 is a flow chart of the pages and procedures in the merchant view hosts process.

In a preferred embodiment as exhibited by FIG. 1, the duties of the processor are split among several computer systems **120a–120c**, **125a–125d**, **130a–130b**. The data store may be implemented through a database system **130a–130b**.

## US 6,993,572 B2

5

**135a–135d.** The Internet **110** serves as the communication link to visitor computers **105a–105f**. In this preferred embodiment, the system utilizes multiple inexpensive computer systems at every level of the architecture. Routing between levels will automatically distribute the load amongst the functioning computers. Increasing throughput becomes a matter of adding more computers, not scaling up the existing ones. This arrangement also provides fault tolerance since the failure of one server will not incapacitate the system as long as another server providing the same service is alive. This approach also permits the distribution of servers geographically. A router **115** may also provide further load balancing.

The tasks performed by the processor may utilize a variety of underlying software technology. In a preferred embodiment, the software architecture can be divided into 3 tiers: web server, application-server and database-server. Each tier is comprised of a number of software layers.

#### Web Server Tier

The Web Server tier accesses application functionality by calling a single “Request” Application Programming Interface (API). The API will take a Document Object Model (DOM) (as specified by W3C in <http://www.w3.org/TR/REC-DOM-Level-1>, which is expressly incorporated herein by reference in its entirety) object as a parameter and return a DOM object as the response. The request will be relayed to the application server tier where a dispatching method will unpack the request object, inspect it, invoke the desired method, and send back the response object. This approach means that new functionality becomes available as soon as the application server is upgraded. It is not necessary to develop a set of “stubs” that mirror the new API call. This is a major advantage because new functionality in the application tier can be exploited immediately simply by modifying the Active Server Page (ASP) scripts. No web server resident Dynamic Link Libraries (DLLs) need to be upgraded so the server does not need to be shut down. The web server tier will typically run on server computers **120a–120c** having a multitasking operating system such as Windows NT from Microsoft or other suitable operating system software. The Web Server tier contains the following layers as illustrated in FIG. 2:

**Web Server Software 210.** In a preferred embodiment, IIS by Microsoft is the server software. It supports serving side scripting using the VBScript scripting language.

**ASP Scripts 220.** All HTML content is rendered by ASP server scripts. The ASP scripting environment can interact with software modules written to Microsoft’s COM specification.

**COM Adapters 230.** A set of COM wrappers provides the bridge between the ASP scripts and other elements of the system. The wrappers provide the necessary data conversions but do not contain any substantial functionality. The wrappers are not application specific.

**API Client Layer 240.** The API Client Layer consists of the very thin “request” API described above. This layer cooperates with the Object Cache layer. For example, before retrieving a catalog from the application layer, this layer may check to see if the requested catalog is already in the object cache.

**Object Cache 250.** The object cache contains the responses to previously submitted requests. All items in the cache are marked with an expiration time that is set at the time they are originally retrieved. The purpose of this layer is to reduce the load on the application tier.

6

**Remote Procedure Call Client 260.** The Remote Procedure Call Client provides connectivity to the application tier. It also provides request routing. In the event of application server failure, this client will automatically reconnect to a working server. This piece of software is not application dependent. In a preferred embodiment, the DBMS Component Server Client is the Objectstore Component Server Client (OCSC).

In a preferred embodiment, the Web server layer supports the following four Web interface modules. In a preferred embodiment, these modules are encoded with ASP to generate appropriate HTML and Javascript. The four modules are as follows:

#### 1. Merchant Manager

The Merchant Manager is the “Control Center” for Merchants. This module allows the merchant to maintain their products, catalogs, contact information, track orders, process returns, run reports, etc.

A merchant representative must login before performing any system activities. Any valid merchant user will be able to perform all possible actions on the merchant to which it is related. Only registered merchants will have a valid account. An account for a merchant is established when the merchant registers with the system. A merchant representative may initiate registration via a web interface. The signup process must collect basic merchant information, including the information necessary to pay the merchant, and a password, which will be used to create a user account for the merchant. Once the merchant is approved (this may be automatic), the merchant will be sent an email containing a unique user id which can be used to login to the system.

When a representative logs in, she is taken directly to the Merchant Manager as seen in FIG. 9 and assigned a Merchant Session ID (Merchant SID). All pages within the merchant system must retrieve the MerchantSID from the HTTP request and validate it. If the session does not validate, the representative is taken back to the Login screen.

This module contains the following submodules:

#### Account Information

A merchant representative will be able to maintain the basic merchant profile, which includes the information needed to pay the merchant, the merchant’s password, and the merchant’s shipping policy information. FIG. 23 depicts the pages and procedures in a typical merchant account maintenance process. The representative selects to maintain account information **2305** from the Merchant Manager page **2300** leading to the display of the a basic information modification page **2310**. Each modifiable information type could be altered through a designated page available through the basic information page **2310**. Each such page could provide functionality to save any changes made to the particular page.

This sub-module allows a merchant to maintain the following types of information:

**Basic information 2310**—name, description, address, logo

**Contacts 2320**—for admin, finance, returns, support, order notification

**Product Defaults 2330**—price labels, unit of weight, display options

**Payment Info 2340**—check or ACH, payee info, bank info

**Shipping Option 2350**—by price, items, weight, other or NA

**Shipping Table 2360**—maintain shipping methods and prices



## US 6,993,572 B2

7

Tax Schedule **2370**—set tax rate for states in which taxes are collected. This may be automated in the future.

#### Products and Catalogs

Here the merchant can both maintain products and arrange them into catalogs. Example product attributes include:

- name
- description
- attributes—such as size, color, etc.
- price(s)—normal, sale, competitor's and the price can be set or changed by an attribute
- small image—used in most places
- large image—used for zoom-in in shopping

The merchant can also maintain their catalogs and categories. A catalog is the top level category. A merchant can have one or more catalogs. Each catalog will be presented to Hosts as a separate entity. However, it is still tied back to the merchant. The merchant logo can be assigned to the catalog or a different image selected.

A catalog is considered a commerce object. Further, a catalog is populated with product or product category commerce objects. An indicator for dynamic selection of a product or product category may also be considered a commerce objects; however, such objects would not appear in a catalog.

Categories are then placed in the catalog(s). Categories can also be placed into other categories. A catalog or category can contain an infinite number of categories but really should be kept to less than 10 at any given level for presentation purposes. The bottom level categories contain products. The product node is actually a pointer to the product in the inventory table. This allows for a product to be placed into multiple categories.

A catalog, category or a product can be set to be inactive. If it is set as inactive, it will not be available to the hosts to browse or sell. It will also not be available to customers in the shopping area. If a catalog or category is set as inactive, then every item beneath it (categories or products) is also inactive.

A product also has a flag to indicate it is out of stock. When a product is no longer going to be sold by the merchant, it should be set to inactive. If the product is simply out of stock, thus temporarily unavailable, the out of stock flag should be used.

If a host has an existing link that points to an inactive or out of stock product or an inactive catalog or category, the customer will be taken to the first level above that is active. For example, if a customer clicks on a Link that points to coffee pot A, and coffee pot A has been set to inactive, the shopping page will display the entire coffee pot category (all the active coffee pots). If the coffee pot category was set to inactive, then the shopping page would go to the next level up (such as Kitchen Appliances). In this case the shopper will be given a message indicating the selected product or category is not available. If a host has a link associated with a dynamic selection indicator commerce object, the triggering of such a link will cause the dynamic selection of a product or product category.

FIG. 24 depicts pages and procedures used in a merchant catalog and product maintenance process. When a merchant representative logs into the system, she is presented with the merchant manager page **2300**. From this page, she may choose to proceed to the edit products and catalogs page **2400**. On this page, she may elect to search for a product through entering criteria **2405**. She may elect to preview a

8

particular product **2410** and, from the preview, view additional information associated with the particular product **2415**.

From the edit products and catalogs page **2400**, she may also choose to edit a particular product **2420** or edit by catalog or category **2442**. In editing a particular product **2420**, she may elect to save the information associated with the product **2422**, select a current attribute to edit **2424** leading to the attribute edit page **2430** or create a new attribute associated with the product **2426**. An attribute includes a collection of options such as sizes or colors. If she selects to add a new attribute **2426**, a new attribute creation page is presented **2428**. Upon creation of the new attribute, the new attribute is saved, and the representative proceeds to the attribute edit page **2430**. From this page, she may choose to save or cancel the current attribute edit **2435**.

If the representative chooses to edit by catalog or category **2442**, she is presented a page allowing selection of catalogs or categories **2440** through navigating the catalog/category hierarchies **2444**. Once a particular catalog or category is identified, she may edit it via a catalog/category edit page **2450**. After editing, the alterations are saved **2455** returning her to the catalog or category selection page **2440**.

#### Reports

A merchant representative may request on-demand reports. Such reports include an account statement that details all payments to the merchant, and statistics about catalog visits and sales. Statistics can be correlated to hosts, links, products and time periods.

As illustrated in FIG. 25, a merchant representative begins at the Merchant Manager page **2300**. She selects the view reports option **2505** to view the report menu page **2510**. From the reports menu page **2510**, she may enter criteria **2514**, **2518** leading respectively to a revenue summary page **2520** or a monthly statement page **2530**. From the monthly statement page **2530**, she may change criteria **2535** to view a revised monthly statement **2530** or return to the report menu **2510**. From the revenue summary page **2520**, she may select a specific item **2525** for receiving a detailed revenue page **2550**, alter the criteria **2527** to receive a revised revenue summary **2520**, or return to the reports menu page **2510**. From the detailed revenue page **2550**, she may return to the revenue summary page **2520**.

The following reports are available for the merchants to track their results:

#### Revenue Summary by Month

This report provides sales and traffic information summarized by month. Data includes number of sessions, number of orders, gross and net sales, etc. Summarizes at the month level and allows 'Drill Down' to daily information.

#### Revenue Summary by Host

This report provides sales and traffic information summarized by host. Data includes number of sessions, number of orders, gross and net sales, etc.

#### Revenue Summary by Product

This report provides sales and traffic information summarized by Product. Data includes number of sessions, quantity in shopping cart and gross order amount.

All reports can be run as quick reports (this month, last month, this year, last year, all sales) or by inputting a specific date range.

#### Order Tracking

A merchant representative can access a web interface that allows her to report the status of orders. This includes:

reporting when the order was shipped, along with tracking information, and the status of all returned items.

The order tracking sub-module allows the merchant to manage all areas of an order. An order can have the following status:

- new—the order has been received and credit card information validated
- pending—the merchant has acknowledged the order, it is waiting to be shipped
- shipped—the merchant has shipped the order

An order can be shipped in multiple shipments. The merchant is credited for sales on shipped items.

The customer may also return part of an order or the entire order. The customer will obtain an RMA number (see the Shopping sub-module). All the merchant needs to do is acknowledge they have received the product back from the customer.

Review Hosts

The Merchant Manager also allows the merchant to review which hosts have built links to that merchant's products. The merchant can also view the host web page containing such links.

A merchant representative will be able to review the list of hosts with which the merchant has a relationship. The merchant will have access to some basic information about the host, including at least one of the host's links, so that the host's look and feel can be evaluated.

In a preferred embodiment, a representative may review hosts through pages and procedures as depicted in FIG. 26. She begins at the Merchant Manager page 2300. She selects the review hosts option to view the merchant-host relationship page 2600. From this page, she may elect to view one of her products in the host's look and feel 2610 or view a list of links with the selected host that are directed to her commerce objects 2620.

Automated interfaces can be introduced for merchants wishing to integrate their business systems with the func-

placed, and send order status updates back via automated interfaces. This integration is accomplished through the establishment and use of a standardized communication protocol.

In a preferred embodiment, merchants integrate by exchanging specially formatted XML documents over secure HTTP connections (i.e. HTTP over SSL). If the request is a query, the HTTP response will contain an XML document with the query results. Likewise, if the request is a command, the response will be an XML document containing the success or failure of the command.

Automated requests and responses are XML documents as described by the W3C's XML 1.0 specification, which may be found at <http://www.w3.org/TR/REC-xml> and which is expressly incorporated herein by reference in its entirety. The XML specification only describes the syntax of an XML document, it does not place any restrictions on the content of the document. The content of requests and responses is described using a formal notation known as DCD (for Document Content Description). DCD's are described in a note that was submitted to the W3C by Microsoft and IBM. The DCD note can be viewed online at: <http://www.w3.org/TR/NOTE-dcd> and which is expressly incorporated herein by reference in its entirety. A specific DCD describes the format of a request or response in the same way that the SMTP specification describes the format of an email. Typical DCDs for Automated Interfaces may be accessed at the following URLs: <http://automation.nexchange.net/dcd/ManageInventory.01.02.dcd.xml> and

<http://automation.nexchange.net/dcd/ManageCatalog.01.02.dcd.xml>, both documents are expressly incorporated herein by reference in their entirety.

All interfaces have the same basic structure. The table below illustrates the basic structure of Automated Interface requests and responses.

HEADER		Response		<pre>&lt;ManageOrders specification='http://www.nexchange.net/automated/xml/ManageOrders. 01.01.dcd'&gt;   &lt;RequestHeader&gt;     &lt;Authentication       username='xxx'       password='xxx'       scope='xxx'     /&gt;     &lt;Instructions OnFail='HALT' /&gt;     &lt;Receipt Processor='xxx' Date='xxx' Number='xxx' /&gt;     &lt;ResponseSummary Status='SUCCESS'&gt;       Error Message Here     &lt;/ResponseSummary&gt;   &lt;/RequestHeader&gt;   &lt;RequestBody&gt;     &lt;Command status='SUCCESS'&gt;       &lt;QueryNewOrders /&gt;       &lt;QueryNewOrdersResponse&gt;         Query Results Here       &lt;/QueryNewOrdersResponse&gt;     &lt;/Command&gt;     &lt;Command status='SUCCESS'&gt;       &lt;AcknowledgeOrder order_id='xxx'         item_price_total='xxx' /&gt;       &lt;/Command&gt;     &lt;/RequestBody&gt;   &lt;/ManageOrders&gt;</pre>	
BODY		Query	query		
		Operation			

tionality supported by the present inventions. Merchants can update their online catalogs, retrieve information on orders

All responses contain the original request with status information and query results appended. The table above

shows a response to a Manage Orders request. The response is divided into a header and a body section (“Request-Header” & “RequestBody” respectively).

The RequestHeader element contains authentication information and global instructions. When the request is returned, the request header will also contain a receipt and a response summary. The authentication element carries the information needed to identify and authenticate the requesting party. The global instruction element contains instruction on how the request is to be processed if an error is received. The remainder of the commands in the request can be processed or the request can be discontinued. In a response, the receipt element is added to the request header. Information in the receipt can be used to recover the response. The response summary element contains a status code, which will be set to “SUCCESS” if all commands were completed successfully.

The RequestBody element contains one or more command elements. The exact content of a command element depends on the interface being used. When a command is submitted, its status attribute will always be “REQUESTED”. When the command has been processed, the response will echo back the command with the status changed to “SUCCESS”, “FAILURE” or “SKIP”. In the case of a query command, the response will contain a query response in addition to the status.

If the request conforms to the DCD, the response will contain the original request with the status and query results embedded. The command status codes must be inspected to determine what has been done.

If the request did not conform to the specification, two possible error types can occur:

- XML Parsing Error
- DCD Validating Error

Errors are returned as NexError node. If a NexError is returned, the XML document has not been processed. The returned XML should always be examined for a NexError.

If the request document is not valid XML, an XML Parsing Error will be returned. A NexError node will be added around the entire document. It will look similar to the following:

```
<NexError Msg=" XML Parsing Error" ... >
  <XMLParseError errorcode=" " reason=" " line=" "
linepos=" ">
    offending section of document
  </XMLParseError>
</NexError>
```

The errorcode, reason, line and linepos will contain information explaining what the error is and the location in the file.

If the request document is valid XML but does not match the published Interface DCD, a DCD Validating Error will be returned. A NexError node will be added around the entire document. A DCDError node will be embedded in the document at the location of the error. It will look similar to the following:

```
<NexError Msg=" XML Validating Error" ... >
  <XMLValidateError msg="Find the DCDError Node in the
document for detailed error information."/>
    ... Valid Portion of document ...
  <DCDError message=" ">
```

-continued

```
offending section of document
</DCDError>
... Valid Portion of document ...
</ XMLValidateError >
</NexError>
```

The following is an example request attempt to add one new product and to update the price of an existing product.

```
<ManageInventory
specification='http://automation.nexchange.net/dcd/Manage
Inventory.01.02.dcd.xml'>
  <RequestHeader>
    <Authentication username='xxxxx'
password='xxxx' scope='MNNN' />
    <Instructions onfail='CONTINUE' />
  </RequestHeader>
  <RequestBody>
    <Command status='REQUESTED'>
      <AddProductDef updateifexists='1'>
        <ProductDef
          id='saw'
          skumask='saw'
          name='saw'
          description='A Circular Saw From Festo'
          shortdescription='Festo Circular Saw'
          info='no comment'
          image='http://216.0.58.242/rmttools/fw132saw.jpg'
          largeimage='http://216.0.58.242/rmttools/fw132saw.jpg'
          usualprice='145.00'
          saleprice='135.00'
          compareprice='215.00'
          salelabel='HOT PRICE'
          instock='1'
          complan='default'
        >
          <AttributeDefList/>
          <KeywordList/>
        </ProductDef>
      </AddProductDef>
    </Command>
    <Command status='REQUESTED'>
      <UpdateProductDef
        id='saw'
        image='http://216.0.58.242/rmttools/fw132saw.jpg'
      />
    </Command>
  </RequestBody>
</ManageInventory>
```

2. Host Manager

The Host Manager is the “Control Center” for Hosts. Here, a Host can track sales, design their store front, generate links to merchant products, get traffic/order reports, update account information, etc.

For a host to gain access to the host manager system, the host must be registered. FIG. 4 depicts a flow chart for a typical registration process. A host representative may initiate contact 410 with the system via a web interface. The signup process must collect basic host information 420, including the information necessary to pay the host a commission for purchases through his site, which is saved by the system 430. Optionally, a click agreement containing terms of use 440 may be presented requiring agreement 444 to proceed. If at some point the representative elects to cancel 425, 458 or reject the use agreement 448, he or she is returned to her point of entry 410. The system may then request the representative to select a user identification and a password 450. If the selected user identification is already in use 454, the representative may be prompted to select a

## US 6,993,572 B2

13

user identification **450**. The information associated with the host is stored **460**, and the representative may proceed to the host manager system page **470**.

When a host logs in, they are taken directly to the Host Manager, as seen in FIG. **10**, and assigned a Host Session ID (Host SID). All pages within the host system must request the Host Sid and call the ValidateHostSessionID function. If the session does not validate, the user is taken back to the Login screen.

This module contains the following submodules:

Account Information

This sub-module allows a host to maintain the following types of information:

Administrative Contact—name, address, phone

Payee Contact—name, address, phone, SSN

Site Information—site name, URL, description

Site Demographics—# of visitors, type of visitors, comments

A host representative will be able to maintain basic host information, including the information needed to pay the host, and the host's password. FIG. **5** depicts a flow chart of the pages and actions in a typical maintenance process.

The Host Manager is the "Control Center" for Hosts. Here, a Host can track sales, design their store front, generate links to merchant products, get traffic/order reports, update account information, etc

For a host to gain access to the host manager system, the host must be registered. FIG. **4** depicts a flow chart for a typical registration process. A host representative may initiate contact **410** with the system via a web interface. The signup process must collect basic host information **420**, including the information necessary to pay the host a commission for purchases through his site, which is saved by the system **430**. Optionally, a click agreement containing terms of use **440** may be presented requiring agreement **444** to proceed. If at some point the representative elects to cancel **425**, **458** or reject the use agreement **448**, he or she is returned to her point of entry **410**. The system may then request the representative to select a user identification and a password **450**. If the selected user identification is already in use **454**, the representative may be prompted to select a user identification **450**. The information associated with the host is stored **460**, and the representative may proceed to the host manager system page **470**.

When a host logs in, they are taken directly to the Host Manager, as seen in FIG. **10**, and assigned a Host Session ID (Host SID). All pages within the host system must request the Host Sid and call the ValidateHostSessionID function. If the session does not validate, the user is taken back to the Login screen.

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Payee Contact—name, address, phone, SSN

Site Information—site name, URL, description

Site Demographics—# of visitors, type of visitors, comments

A host representative will be able to maintain basic host information, including the information needed to pay the host, and the host's password. FIG. **5** depicts a flow chart of the pages and actions in a typical maintenance process. The representative has previously logged into the system to reach the host manager system page **470**. From the host manager system, the representative selects to update her account **510** leading to a host information maintenance page **520**. The

14

representative can modify host information and, then choose to save or cancel the modification **530**. In either case, the representative is returned to the host manger system page **470**.

Store Front Design

The store front design is where the host's look and feel is captured. The look and feel is captured by selecting an example page the host, retrieving the sample page from the host, identifying the look and feel elements from the sample page and saving the identified look and feel elements. "Look and feel elements" include logos, colors, page layout, navigation systems, frames, 'mouse-over' effects, or other elements that are consistent through some or all of a Host's website. A typical system for accomplishing this task would include a data store for storing look and feel descriptions, a communication channel to the host whose look and feel is to be captured and a processor for executing the capture.

When a customer clicks on a host buying opportunity (link), the next page loaded will be a shopping page. However, this shopping page should retain the host's look and feel. This is accomplished by capturing the HTML text and images that comprise their look and feel and embed within it the shopping HTML content. Any relative URLs in the host look and feel may be changed to absolute URLs back to the host system.

In a preferred embodiment, there are five steps to a process capturing the host's look and feel, converting relative URLs to absolute URLs and validation of links.

A host representative will be able to capture host look and feel information and to update host look and feel information through recapture. FIG. **6** depicts a flow chart of the pages and actions in a typical look and feel capture process. The representative has previously logged into the system to reach the host manager system page **470**. From this page, the representative selects to initiate host look and feel capture through a design storefront wizard **605**. An introduction page is presented explaining the process **610** from which the representative proceeds in the following manner:

Base URL **615**—the URL used to convert relative links to absolute links, as seen in FIG. **11**.

header **620**—the HTML to be rendered BEFORE the shopping html. Selection may be made by code, as seen in FIG. **12**, by graphical point and click selection or other suitable selection method.

footer **625**—the HTML to be rendered AFTER the shopping html. Selection may be made by code, as seen in FIG. **13**, by graphical point and click selection or other suitable selection method.

preview **630**—shows what the shopping page will look like (nothing has been captured yet). From this preview page **630**, as seen in FIG. **14**, the representative may elect to return to earlier stage to perform a change **635**, **640** or **645** of base URL, header or footer respectively. The user may also have access to a preview **650** with example content included to demonstrate a typical page with both content and look and feel **680**, as seen in FIG. **15**. From the generic preview page **630**, the representative may choose to continue **655** with finalizing the look and feel **660**.

final check **660**—finalize the captured look and feel, as seen in FIG. **16**, this page may allow validation of links and images and offer to save the captured look and feel. Once validation, if any has been performed, and the look and feel has been saved, the process completes **675**.

validation 665—validate the link and image URLs in the header and footer HTML. FIG. 17 displays the screen capture of page that could be used to display validation progress.

save 670—Actually captures, processes and saves the storefront information. A completion page such as seen in FIG. 18 may be displayed.

For security reasons, javascript is accepted but applets are stripped out in the preferred embodiment.

Link Generator

The Link Generator allows host to create and maintain the shopping opportunities that they can then place on their site. Each Link is assigned a unique Link ID. The Link ID identifies who the host is, who the merchant is, and what commerce object (catalog, category, product or dynamic selection) is linked to.

The first time a host builds a Link to a merchant's product, category or catalog, an approval of that host for that merchant may be made. Until the host is approved, they cannot see the Link ID that has been assigned to the newly created Link.

The code the host embeds on their web site is as follows:

```
<!-- BEGIN NEXCHANGE LINK -->
<!-- For more information go to http://www.nexchange.com -->
<!-- The following 2 lines MUST NOT BE CHANGED to ensure proper
crediting -->
<IMG BORDER="0" SRC="http://www.nexchange.net/img.asp?LinkID=
xxxx">
<a href="http://www.nexchange.net/route.asp?LinkID=xxxx">
<!-- Substitute your own text or image below -->
** YOUR TEXT OR IMAGE HERE **</a>
<!-- END NEXCHANGE LINK -->
```

There are several points to note here:

The image src (img.asp) is actually an ASP program that returns a single transparent pixel. This is used to track impressions (how many times the link was displayed on the host site).

The route.asp page is a page that routes the customer to the shopping page. As additional servers are added, this will become very important for load balancing.

The 'xxxx' for the LinkID='xxxx' is the Link ID assigned to the Link in the Link Generator.

A host representative will be able to generate links to commerce objects. FIG. 7 depicts a flow chart of the pages and actions in a typical link generation process. The representative has previously logged into the system to reach the host manager system page 470. From this page, the representative selects to generate links 705, which transfers her to a page containing a list of all previously generated links for that host 710.

From this page, the representative may choose among several options: view an existing link 722, remove an existing link 735, edit an existing link 728 or add a new link to either a merchant with whom a link already exists 720 or a merchant without an existing link 715. In viewing an existing link 722, the page containing the link may optionally displayed in a separate window 725; as a consequence, the representative could continue to interact with the list of available links page 710 in the primary window. The representative could select a link for removal 735 and, upon removal, return to the list of links page 710. The representative may choose to edit an existing link 728 leading to a link modification page 730. After modifying the link, the

new link information would be saved 740, and the representative would return to the list of available links 710.

In adding a new link, a distinction may be made whether a link is made to a merchant to whom the host has previously linked 720 or to a merchant to whom a previous link does not exist 715. In the latter case, an extra optional step may be involved to approve the host with respect to the new merchant as part of the catalog selection process 745. In other embodiments, such a distinction need not be made. In linking to a merchant to whom a previous link does exist 720, a catalog may implicitly be selected. In either situation, the creation process continues by allowing the representative to choose a commerce object to associate with the link 750. Such a commerce object will be a product, a product category, a catalog or an indication that a product, product category or catalog should be chosen dynamically. From this page, the representative may go back to the catalog selection page 745 or proceed with setting link attributes 755 such as the destination upon return from the link (e.g. the point of departure into the e-commerce page or a destination designated by the representative). From this page 755, the representative can return to the commerce object selection page 750 or continue forward with naming and saving the new link 760. Upon completion of naming and saving page 760, the link is saved to the system database 765, and the representative is provided with a link to include within a page on the host website 770. After cancellation at any time, or upon completion, the representative is returned to the list of available links page 710.

Where a host representative chooses a dynamic indicator as the commerce object, the specific content will be chosen contextually based upon the content of the page that includes the link. In a preferred embodiment, keywords in the page are cross-reference with available catalogs, product categories and products to choose the appropriate content for the destination page associated with the link. FIG. 8 is a flow chart of the selection process in such a preferred embodiment.

A visitor is viewing the host page including a link associated with a dynamic selection commerce object 810. The visitor activates the link. Receiving the activation, a determination is made as to whether content has previously been dynamically selected for the activated link 820. If yes, a second determination is made as to whether the previously dynamically selected content is current 830. If this is answered in the affirmative, a page is constructed with the previously dynamically selected content along with the look and feel associated with the host from which the link originated 840.

If either determination is negative, the host page including the link is retrieved 850. The page content is analyzed, and based upon the analysis, content for the link destination is selected 860. The selected content is cached for potential future use 870. Finally, a page is constructed with the dynamically selected content along with the look and feel associated with the host from which the link originated 840. The analysis in 860 may take a variety of forms including, in a preferred embodiment, identification of marked keywords. In another embodiment, keywords may be dynamically determined using word count statistics.

In a more elaborate system, the retrieval process might encompass not only the page containing the link but also other pages linked to the page of link origin. Keywords or word count analysis could be used to determine context based upon the aggregation of pages retrieved. In a further embodiment, differing weights could be given based upon the source of the keyword identified; keywords from the

US 6,993,572 B2

17

page of origin would have a greater weight than keywords derived from pages one link away.

#### Reports

A valid host representative will have on-demand access to a report showing visits to their links and sales. The report will be scoped by date range. Visits can be summarized by merchant and by link. Sales can be summarized by merchant and by link.

As illustrated in FIG. 21, a host representative begins at the Host Manager page 470. She selects the view reports option 2105 to view the report menu page 2110. From the reports menu page 2110, she may enter criteria 2114, 2118 leading respectively to a revenue summary page 2120 or a monthly statement page 2130. From the monthly statement page 2130, she may change criteria 2135 to view a revised monthly statement 2130 or return to the report menu 2110. From the revenue summary page 2120, she may select a specific item 2125 for receiving a detailed revenue page 2150, alter the criteria 2127 to receive a revised revenue summary 2120, or return to the reports menu page 2110. From the detailed revenue page 2150, she may return to the revenue summary page 2120.

The following reports are available for the hosts to track their results:

#### Revenue Summary by Month

This report provides sales and traffic information summarized by month. Data includes number of sessions, number of orders, gross and net sales, etc. Allows 'Drill Down' to daily totals.

#### Revenue Summary by Merchant

This report provides sales and traffic information summarized by merchant. Data includes number of sessions, number of orders, gross and net sales, etc.

#### Revenue Summary by Link

This report provides sales and traffic information summarized by Link. Data includes number of sessions, number of orders, gross and net sales, etc.

### 3. Shopping

The shopping module is the part of the application that allows customers to find, search, select and buy a product. There is also a return product section accessible to the customer after the order has been placed.

Shopping is the part of the application that the general public will encounter. FIG. 19 displays a screen capture of a typical shopping page in a preferred embodiment. FIG. 22 depicts pages and procedures in a shopping process as implemented in a preferred embodiment.

The customer was on a host site and saw a link to buy something created via the Link generator 2200. When he or she clicks on the link, he or she is taken to the shopping page parameterized with the Link ID 2210. If an error occurs during this transition, the visitor is routed to a link error page 2205.

A variety of generic information may be available from any shopping page within the system. Such information could include information about the e-commerce outsource provider 2222, information about the merchant offering the current commerce object 2224, information about an involved party's privacy policy 2226, or information about an involved party's security policy 2228.

Customers will be able to browse a merchant's catalogue and place items in their shopping cart 2212. When the customer is ready to checkout 2260, the system will acquire payment information 2262 and shipping information 2264 from the user, confirm this information 2266, and execute the transaction. The receipt including a URL that can be used

18

to track the order status (e.g.—it could be bookmarked) will be displayed to the customer 2268. By visiting the URL provided upon checkout from the shopping experience, the customer can check the status of their order, initiate returns, and check on their return status.

This module contains the following submodules:

#### Session

Each time a new shopping session is started, a customer session is created for the shopper. This Customer Session is assigned a Session ID (SID). All pages within the shopping system must request the SID and call the ValidateSessionID function. At any time if a session error occurs, a session error page 2215 may be presented.

Unlike the merchant and host sessions, the shopping session is persistent. The session information retained is what the customer has placed in the cart and if they have checked out. The SID is also written back to the customers browser as a cookie. If a customer returns to the Shopping page an attempt will be made to use the last session they had. It will only be reused if the ALL of the following are true:

The host the customer is coming from now is the same host as in the previous session

The merchant for the current link is the same as the merchant in the previous session

The previous session was not "Checked Out".

The session is not older than a certain age.

#### Product Search and Selection

The main shopping page begins at the entry point that the host used to build the Link. This can be to a specific product, a category of products, a category of sub-categories, a complete catalog or a dynamically selected destination. However, no matter what entry point was chosen, the customer can navigate to every item contained in the merchant catalog used for the Link serving as the customer's entry point to the shopping. The customer may browse the catalog 2230 or search for a specific product or product category 2240.

#### Shopping Cart

The Shopping Cart is the main information saved in a customer session. As a customer places products in the shopping cart, we retain information such as:

name of the product

price of the product

any attributes (size, color, etc)

host commission rate

merchant revenue percent

This information must be stored redundantly in the shopping cart because the price, name, etc may change later and the values at the time of purchase need to be retained. The shopping cart interface also allows the shopper to remove a product and/or change the quantity through a view shopping cart page 2250.

#### Check Out

The check out process is separated into two distinct pieces.

#### Order Capture

#### Credit Validation

Order capture is the process of obtaining the customers billing and shipping information and creating a pending order. The credit card information is checked to make sure it is a valid number for the card type but it is not actually processed with a credit card authorization service (i.e. CyberCash). The order is accepted, assigned an order id and the customer is given an on screen and email confirmation. The pending order has a status of new.

The credit validation process happens sometime after the order capture has occurred. The customer's billing informa-

tion is sent to the authorization service. The pending order now has the status of authorized.

If the card is validated, the order is accepted and placed into the The order table. The pending order has a status of accepted. If the billing information fails validation, the pending order status is set to rejected and an email is sent to the customer informing that the credit card information could not be validated.

#### 4. System Manager

The System Manager is the “Control Center” for administrators. The administrator can monitor the day-to-day activities and status of the system. When an administrator logs in, he or she is taken directly to the System Manager and assigned a Nexchange Session ID (NexchangeSID). All pages within the System Manager system must request the NexchangeSID and call the ValidateNexchangeSessionID function. If the session does not validate, the user is taken back to the Login screen. Access to administration functions will require authentication using the name and password for a valid administration account.

The home/main page of the System Manager provides a quick summary of the current system status; a screen capture of a typical main page in a preferred embodiment is seen in FIG. 20. This summary includes pending orders, orders, host statistics, merchant statistics and an unattended orders list.

An administrator will be able to configure a hosts or merchant’s payment policy. This includes specifications for any holdbacks, and a method for calculating commission/payment. At the request of a merchant, an administrator will be able to configure the system to reject all shopping traffic from a particular host-merchant arrangement. The host and merchant contacts will be notified via email. An administrator will also be able to activate or deactivate a host. The system will reject shopping traffic from inactive hosts. When a host’s status is changed, the host contact will be notified via email. An administrator will configure the system to enforce system-wide policies. System-wide policies include the number of days allowed for returns.

The system will periodically run an audit process and report on situations of concern. For example, an audit could search for orders that have not been serviced for a certain period of time. The system may also report on possible security situations such as an inordinate number of account lockout incidents.

This module contains the following submodules:

##### Utilities

The following utilities are available:

- List Pending Orders
- List Orders
- List Rejected Orders
- List Returns

##### Host

The following actions are available:

- List Promos
- List Hosts
- Maintain Host Tiers
- Host with Pending Merchants

##### Merchant

The following actions are available:

- List Merchants
- Copy a Category
- Find Category Links
- Add a New Merchant
- Maintain Brands

#### Application Server Tier

The business functionality is provided via “application servers”. An application server will consist of one or more of the business modules, wrapped with an appropriate middleware adapter. This arrangement allows delivery of services via many different mechanisms. For example, if it becomes desirable to serve some functions to a Java client, a Java Remote Method Invocation (RMI) version of an application server could be built. The new server could be developed rapidly because only an RMI “wrapper” would need to be developed, while the application logic would be reused. In a preferred embodiment, this layer consists of a set of core C++ software modules that encapsulate business functions.

The Application Server tier may run on one or more application server computers. The application servers are stateless. This means that, for two application servers serving the same functionality, “one is as good as another”. In the event of failure, a client’s requests may be handled by a different server than before the failure. Since it does not matter which server services a request, routing is greatly simplified. The stateless server approach also provides excellent fault tolerance since all application servers can back each other up. Use of a combination of “sticky routing” and caching to significantly ameliorate any detrimental performance implications of the stateless approach, while preserving most of the benefit. Once a client begins using a particular service, the system will show a preference for routing future requests from that client to the same server. The servers maintain a cache recently used data and will only access the database if the desired item cannot be used in cache. Since the routing is sticky, the client’s data will often be in cache, and in many cases, no database access will be required. Should the client be routed to a new server, the session data can be retrieved from the database as occurs in the “vanilla” stateless model. In a preferred embodiment, the functionality of this layer utilizes one or more low cost server systems 125a–125d running a suitable operating system such as Microsoft Windows NT. This tier is also composed of several software layers as illustrated in FIG. 3:

**Remote Procedure Call Server 310.** This software provides connectivity to the Web Server layer and is not application dependent. In a preferred embodiment, this software layer is the Objectstore Component Server.

**Application Logic 320.** This software encapsulates the business functionality. The design of this software layer and the various application servers is more fully described below.

**Virtual Database 330.** The virtual database layer allows the application data to be distributed across multiple Database servers while insulating the application layer from the physical storage configuration. The virtual database contains a table that maps object types to physical databases. All database objects or records of a given type are distributed across the permissible databases. Databases can be added while the system is live to permit expansion onto new servers. Overburdened databases can be closed to prevent assignment of new data to them. Databases can be moved to different physical servers. All stored objects are referenced by a handle which is unaffected by the physical location of the referenced data. The virtual database layer also permits a collection of objects distributed across multiple servers to be indexed and searched.

**DBMS Client 340.** This software provides access to data stored in the databases. In a preferred embodiment, the DBMS client is Object Design’s Objectstore client. All

## US 6,993,572 B2

## 21

Objectstore clients contain a cache of recently used database pages. An optimistic locking scheme is used to ensure cache consistency. The caching scheme is very effective in the present invention because it is optimized for many readers and few writers. In a preferred embodiment, the application server layer includes the following eight application servers:

1. Cashier—Collects checkout information: billing info, shipping preferences, etc.

The Cashier server is analogous to a cashier in a “bricks and mortar” store. The cashier’s responsibilities are listed below:

Collecting Information Necessary To Complete a Sale.

This information will include billing information, shipping address(s) and preferred shipping methods. In some cases, the information to be collected may depend on the contents of the order. The cashier will also access the appropriate merchant policy information to assist in determining what data should be collected.

Providing an Itemized Account of the Total. Upon receiving the necessary data, the cashier will compute the applicable taxes, shipping charges, etc, and provide an itemized account of the order total.

Execute the Sale. Upon request, the cashier will execute the sale. A copy of the relevant information will be sent to the credit processor. When the credit processor approves the orders, the cashier will break the customer’s order into individual merchant orders and forward them to the Merchants’ Order Tracking server. The cashier will also post a record to the Ledger at this time.

2. Catalog—Houses product hierarchies. Conducts product searches.

The catalog is an arrangement of product information. The catalog server supports a hierarchical browsing mode and various searching functions. Its responsibilities are listed below:

Retrieve a catalog upon request. The catalog will include all content for a shopping experience. For products, the information will include the product description, price and options.

Retrieve a list of products matching a query. This will initially support simple keyword searching, but may be expanded to more sophisticated searching techniques.

3. Credit Processor—Conducts card validation and fraud screening.

The credit processor takes a candidate order and performs card authorization and fraud screening. The card processor cooperates with the order tracker to keep the status of the order updated.

Perform Credit Card Authorization. Contact the card processing vendor and authorize the card. Retrieve the Address Verification System (AVS) code for use in fraud screening.

Perform Fraud Screening. The system performs a fraud screening analysis based on the following factors: dollar amount of the order, AVS code, whether the billing and shipping address match, and whether the email address given is a free e-mail account.

4. Notifier—Sends messages.

The Notifier keeps track of who wants to be notified of what and how they should be notified. The notifier receives notification of various system events and takes the appropriate course of action. The appropriate course of action will depend upon the event and the party to be notified. For example, a merchant that does a high volume of sales and is

## 22

already integrated with the system may not wish to receive email notification of every order.

5. Ledger—Records and reports on all financial events.

The Ledger is a record of all financial events. The ledger contains interfaces for posting events and interfaces querying and inspecting the ledger. Responsibilities include:

Post an Order Event. The order event happens when the shopper confirms an order.

Post a Sale Event. The sale event occurs when a merchant marks the last item in an order shipped.

Post an Return Merchandise Authorization (RMA) Open Event/Post an RMA Completed Event/Post an RMA Canceled Event

Post a Journal Entry. This interface will be used to record non-standard events. The posted ledger entries must collectively have an equal number of debits and credits.

6. Order Tracker—Records and reports on order status.

This is the repository of order information. The order tracker includes a cashier’s interface for creating a new order, a Merchant’s interface for keeping the order status updated, and a Customer Service interface for checking on the status of the order and making relevant annotations.

Query Order Status. This method is used by purchaser to check on the status of a pending order.

Ship Order. This method is used by a merchant to document the parceling of an order into shipments.

7. Shopping Cart—Holds products that have been selected for purchase.

The shopping cart is simply a collection of Inventory Reservation documents that represent the items that have been selected by the shopper. The shopping cart includes methods for adding and removing Inventory Reservations and for inspecting the contents of the cart.

8. Warehouse—Inventory availability information. Product configuration interfaces.

The Warehouse represents a collection of physical items that are in stock. Responsibilities of the Warehouse are listed below:

Provide Information on Stock Levels of a Particular Item/Order Items Having Low Inventory Levels. This is an advanced capability by which inventory may be dynamically reserved from a merchant, based on the current inventory levels.

Provide Information on Product Configuration Options. The warehouse will provide a blank Inventory Reservation document that will specify all of the product’s configuration options.

Issue Reservations Against Inventory. A shopper will fill out an Inventory Reservation (which includes all configuration options) and submit it to the warehouse. If the item, as configured, is available, the reservation will be issued. This will serve to reserve the inventory for a fixed period of time.

#### Database Server Tier

Finally, the Database server tier is composed of a single software layer. This layer is responsible for low level manipulation of the data in the one or more databases. This tier may consist of multiple database servers. Using multiple servers is a major advantage for obvious reasons. The system’s database chores can be distributed to many different servers. In a preferred embodiment, the database server is Object Design’s Objectstore server. Objectstore supports a “warm failover” mode which allows a backup server to take over automatically if the primary should fail. An



US 6,993,572 B2

23

Microsoft SQL server is also used in the preferred embodiment to maintain financial records although properly configured another DBMS such as Objectstore or a commercially available accounting package could provide capability suitable for financial record keeping.

The foregoing discussion describes the primary actors interacting with a system according to the present invention. After identifying these actors, typical transaction flows through the system are presented.

There are three main parties in the outsourced e-commerce relationship, excluding the end consumer. These parties include Merchants, Hosts, and the e-commerce outsource provider. This folds into two parties where one party plays the dual role of Host and Merchant.

#### Merchants

Merchants are the producers, distributors, or resellers of the goods to be sold through the outsource provider. The primary responsibilities of a Merchant are to:

Maintain an up-to-date catalog within the system including all products that are available for sale in storefronts served by the outsource provider

Create approval standards for passively recruited Host applicants based upon website profiles and target audience characteristics

Fulfill all orders received from the e-commerce outsource provider

Provide assistance to outsource provider regarding promotional strategies. This can be accomplished by supplying marketing literature and materials, as well as any sales incentives. The Merchant owns the marketing literature and materials, and may access and modify these items as necessary.

Provide service and support to customers generated via the outsource e-commerce provider

Maintain internal records of orders filled through the outsource provider and process payments from the outsource provider for these orders

Inform the e-commerce outsource provider of any backlogs, fulfillment delays, product changes, or other significant situations

#### Hosts

A Host is the operator of a website that engages in Internet commerce by incorporating one or more link to the e-commerce outsource provider into its web content. The responsibilities of a Host are to:

Use the outsource provider Host Manager service bureau to select the Merchants and products that will be offered from the Host's website

Promote transactions through the e-commerce outsource provider hosted by the website

Regularly review the Merchant offerings for which they have been approved in order to take advantage of new products and to review sales and promotional strategies made available to them by the Merchant

#### E-Commerce Outsource Provider

The role of outsource provider is to:

Develop and maintain the outsource provider service bureau—the systems and software which provide the platform for e-commerce support services

Identify and recruit target Host websites and monitor/manage these relationships

24

Create customer-transparent Host processing “pages” on a secure server to receive order and payment information

Create, maintain, and update the “look & feel capture” process through which consumers are able to shop in a Merchant-controlled storefront within the design and navigational context of the Host website, preserving the ownership of the visit experience by the Host

Authorize credit card transactions (in most cases)

Process credit card payments for orders received (in most cases)

Pay periodic commissions to Hosts for orders shipped during a prior period

Transmit orders to Merchants

Pay Merchants for orders filled

Manage the commission structure for Merchant-Host relationships to maximize sales and revenues

Screen and approve Host applications

Support and monitor the merchandise return/refund process and other customer service functions

This following describes the order entry and settlement process from the initial promotion on a Host website all the way through to fulfillment, payment processing, commission payment, and Merchant payment.

#### Order Placement, Fulfillment, and Settlement Overview

The overall transaction process is very straightforward. The following is a list of the steps involved in receiving and processing an order request.

a) A customer visits a Host website and, through contextually relevant content, becomes interested in a product offered.

b) The customer selects the item(s) that she wishes to purchase by clicking a product image, banner-style link, or text link, or other offer format taking her to a dynamically generated web pages which retain the look and feel of the referring Host and are served by the e-commerce outsource provider.

c) The customer browses through the products offered, indicating which items are to be purchased and in what quantities via forms on-screen. Selected items appear within the shopping cart at the top of the shopping interface. The user remains on the product screen without ever being involuntarily removed to a detailed shopping cart-only screen, representing a significant enhancement over most shopping cart technology in place today. When all desired products are selected, the customer initiates the checkout procedure, never leaving the Host website.

d) The secure checkout interface appears, still consistent in look and feel with the Host's referring website. The customer completes the order form, provides all billing and shipping information required, confirms the items selected for purchase, and remits credit card information for payment processing.

e) Assuming the payment method is authorized, the customer is returned to another section of the Host's website, possibly just returning to the page in which the offer was placed, as determined by the Host.

f) The e-commerce outsource provider passes the order to the Merchant in real time. The credit card may be charged at this point or upon confirmation of shipment.

g) The Merchant receives and logs the order.

h) The Merchant then assembles and ships the order to the customer, keeping the outsource provider apprised of the order status.

i) Periodically, the outsource provider will remit payment to the Merchant for that period's filled orders.

## US 6,993,572 B2

25

- j) Periodically, the outsource provider will remit payment to Hosts for all commissions earned in the prior period.

## Host Process Flow

The process flow for a prospect to become a Host and be fully able to endorse/promote/offer Merchant products is as follows:

- a) Hosts are recruited from three sources: direct recruiting, in which the Host prospect is identified by and approached by an e-commerce outsource provider representative; passive recruiting, in which the Host has been referred to the outsource provider by other Hosts, relevant meta-sites (sites that contain lists of and links to other sites/services), or other sources; and Host Agent recruits, in which a specialized third party Agent identifies and approaches Host prospects. In many cases, the use of online signup forms and brochures may be a factor in recruitment.
- b) Prospect completes the Host application form (except where preapproved), providing information about the type of website(s) operated by the Host, some traffic statistics about these websites and general visitor demographics, and complete contact information. The prospect also selects an outsource provider system user ID and password which will later be used to access the system, retrieve important Hosting information and programming, and modify the custom materials in the outsource provider transaction processing engine.
- c) The application is received and the information therein is reviewed, and the application is either approved or rejected (unless this is a preapproved Host). If approved, the Host's ID and password are activated, and an automated message is sent to the new Host informing them of their approval. This message will also contain instructions for accessing the e-commerce outsource provider system, setting up their links to the outsource provider, and inserting outsource provider data into their website(s). Preapproved Hosts will be immediately able to access this system upon submission of their application.
- d) Host accesses e-commerce outsource provider system to begin the step-by-step setup process. The Host first identifies a page from their own website which will provide the look and feel to be replicated. Following this, the Host configures product selections for each of its approved Merchants and downloads product images, text, and CGI/HTML code for their own website. Host then completes changes to website and activates new content. Hosts are free to promote their use of the outsource provider as they feel is suitable to the product at any time and with any frequency, subject to reasonable limitations.
- e) Hosts will be able to access real-time reports about transaction volume including number of users, average purchase amount per user, number of purchases on specified days or within specified date ranges. Hosts can create customized reports to determine conversion rates, top selling products, commissions earned, paid, and due, and other pertinent information. This information can be leveraged by the e-commerce outsource provider and the Host to improve the efficacy of targeted marketing efforts on the Host's website.

## Internal System Transaction Flow

The e-commerce outsource provider system acts as a clearinghouse for all orders. The system maintains a real-time interface with a credit card authorization and processing service and a robust database engine which is able to process transactions, record all transaction activities, generate reports used for commission payments and auditing of

26

Merchant invoices, and track order status. The transaction flow for the outsource provider service bureau is directly related to the structure of the underlying database.

This flow can be described as follows:

- a) Customer, visiting Host, activates link to commerce object within context of Host's website. This activation is typically accomplished by clicking on a hyperlink of some kind within a webpage of the Host's website.
  - b) The e-commerce outsource provider launches new storefront featuring specific products or product category for Merchant, as determined by Host, with the look and feel of the Host's site. The user is not made aware of the fact that this shopping experience is taking place on an out-sourced server.
  - c) As customer browses through featured items in the Merchant's catalog, the outsource provider serves additional pages while maintaining the look and feel of the Host. The system maintains a dynamic record of customers activities including products reviewed, items selected for purchase (placed into shopping cart), and time spent shopping. The e-commerce outsource provider uses a highly reliable and accurate tracking technology throughout the shopping experience.
  - d) Upon checkout, the system processes customer billing, shipping, and order information via secure (encrypted) data transmission (unless the consumer opts for non-encrypted transmission). This process includes an order confirmation process and a process by which a non-approved credit card transaction may be corrected and resubmitted.
  - e) Upon approval, the outsource provider performs several simultaneous functions:
    - Thank you screen is displayed to customer
    - Customer is prompted to "continue" browsing Host's website.
    - E-mail confirmation is sent to customer detailing order information, fulfillment process, customer service terms and procedures, and other relevant information.
    - Order is transmitted to the Merchant electronically, via e-mail or direct link to order entry system.
    - Order is logged into transaction database and logged by system in conjunction with Host referral information.
    - Host is notified that a sale has been made and commission dollars have been earned.
- The second part of the e-commerce outsource provider service bureau transaction process pertains to reconciliation and settlement with the Merchants.
- a) Orders are transmitted to each Merchant as received and are logged into the system for future reference and reporting.
  - b) Periodically, the outsource provider will pay each Merchant for orders processed during the prior period. Payment will be driven by shipped orders as recorded within the system. Merchants can view their accumulated sales within the system at any time during the period, and historical information will be available as well.
- The final part of the e-commerce outsource provider Service Bureau transaction process pertains to the payment of commissions to Hosts.
- c) Periodically, the e-commerce outsource provider will calculate the accumulated commissions due to each Host from the prior period's results. Hosts will be able to review their earnings on a real-time basis at any point during a period.
  - d) The outsource provider will then pay each Host the appropriate commission amount via electronic payment

## US 6,993,572 B2

27

or check along with a copy of the transactions and total report for the period being settled.

#### Merchant Transaction Flow

Each Merchant will be required to fulfill every order received through the e-commerce outsource provider within a designated time frame. Merchants must also be able to track certain information regularly and accurately. Merchants will be monitored to ensure timely fulfillment in order to provide the best quality customer service.

The steps of the Merchants transaction flow after they have been established within the system are as follows:

- a) The designated recipient of orders within the Merchant organization will check for new orders at least on a daily basis, if not more frequently. Orders are received by the Merchant via e-mail or other electronic notification, including automated direct input to legacy order management systems owned or operated by the Merchant. These orders include all pertinent customer data required for fulfillment of each order. Merchants may also view all orders online, sorted by date, status (new/viewed), or other criteria, and download orders in bulk form directly from the outsource provider.
- b) After receiving the order, the Merchant will ship the order to the Customer within a reasonable time period for the type of merchandise ordered. Merchant will have the ability to modify the shipping status of the orders within the system. Merchants are obligated to provide timely shipping of their products. If any item ordered is out of stock or discontinued, the Merchant must update their catalog on the e-commerce outsource provider immediately and notify any affected customers immediately via e-mail or regular mail. Orders should be processed according to whatever internal process flow has been established by the Merchant.
- c) Upon receipt of payment for the prior month's orders, the Merchant is responsible for reconciling the amount remitted with their own fulfillment records. Any disputes should be addressed by accessing the Merchant interface and querying/updating records.

The embodiments described above are given as illustrative examples only. It will be readily appreciated that many deviations may be made from the specific embodiment disclosed in this specification without departing from the invention. Accordingly, the scope of the invention is to be determined by the claims below rather than being limited to the specifically described embodiment above.

What is claimed is:

1. An e-commerce outsourcing process comprising:
  - a) capturing a look and feel description associated with a host website and storing HTML code corresponding to the look and feel description at a second website;
  - b) providing the host website with a link for inclusion within a page on the host website for serving to a visitor computer, wherein the provided link correlates the host website with a selected commerce object; and
  - c) upon receiving an activation of the provided link from the visitor computer, serving to the visitor computer from the second website page with a look and feel corresponding to the captured look and feel description of the host website associated with the provided link and with content based on the commerce object associated with the provided link;

whereby the visitor receiving the served page at the visitor computer perceives the page as associated with the host website even though it is served from the second website.

28

2. The process of claim 1, wherein the selected commerce object is an indicator for dynamic content selection.

3. The process of claim 2, wherein the content within the served page is dynamically selected according to contextual information derived from the page on the host website including the provided link.

4. The process of claim 1, wherein the selected commerce object is a selected product.

5. The process of claim 1, wherein the selected commerce object is a selected product category.

6. The process of claim 1 wherein capturing a look and feel description associated with a host website comprises:

- a) receiving an identification for an example page from a target website;
- b) retrieving the example page via a communication link to the target website;
- c) identifying look and feel elements within the retrieved example page; and
- d) storing the identified look and feel elements as a look and feel description associated with the target website in a data store.

7. The process of claim 1 wherein capturing a look and feel description associated with a host website comprises:

- a) receiving a URL reference to an example page of a target website in an input field of a computer program; and
- b) receiving with the computer program selections of HTML code encoding the identified look and feel elements.

8. An e-commerce outsourcing system comprising:

- a) a data store including a look and feel description associated with a host website;
- b) a communication link to a visitor computer; and
- c) a processor for executing instructions that perform the steps of:
  - i) capturing a look and feel description associated with a host website;
  - ii) storing the captured look and feel description in the data store;
  - iii) providing the host website with a link for inclusion within a page on the host website correlating the host website with a selected commerce object; and
  - iv) upon receiving an activation of the provided link via the communication link, serving an e-commerce supported page via the communication link with a look and feel based on the look and feel description in the data store and with content based on the commerce object associated with the provided link; whereby a visitor receiving the served page at the visitor computer perceives the page as associated with the host website even though it is served from the data store.

9. The process of claim 8, wherein the selected commerce object is an indicator for dynamic content selection.

10. The process of claim 9, wherein the content within the served page is dynamically selected according to contextual information derived from the page on the host website including the provided link.

11. The system of claim 8, wherein the data store further includes a product record and wherein the selected commerce object is a selected product record.

12. The process of claim 8, wherein the data store further includes a product category record and wherein the selected commerce object is a selected product category record.

US 6,993,572 B2

29

13. An e-commerce outsourcing system comprising:

- a) a data store including a look and feel description associated with a host web page having a link correlated with a commerce object; and
- b) a computer processor coupled to the data store and in communication through the Internet with the host web page and programmed, upon receiving an indication that the link has been activated by a visitor computer in Internet communication with the host web page, to serve a composite web page to the visitor computer with a look and feel based on the look and feel description in the data store and with content based on the commerce object associated with the link.

14. A method for serving pages containing dynamically selected content, comprising:

- a) receiving the activation of a link on a web page designated for dynamic content selection via a communication link from a visitor computer;
- b) retrieving the web page containing the activated link;
- c) automatically selecting content from a content data store based upon analysis of the content of the retrieved web page;
- d) automatically constructing a web page containing a combination of the selected content and a look and feel corresponding to the retrieved web page; and
- e) serving the constructed page to the visitor computer via the communication link.

15. The method of claim 14 wherein analysis of the content of the retrieved web page comprises identification of keywords marked in the retrieved web page.

16. The method of claim 14 wherein analysis of the content of the retrieved web page comprises counting the frequency of keywords on the retrieved web page.

17. An e-commerce outsourcing process comprising the steps of:

- a) storing a look and feel description associated with a first website in a data store associated with a second website;
- b) including within a web page of the first website, which web page has a look and feel substantially corresponding to the stored look and feel description, a link correlating the web page with a commerce object; and
- c) upon receiving an activation of the link from a visitor computer to which the web page has been served, serving to the visitor computer from the second website a composite web page having a look and feel corresponding to the stored look and feel description of the first website and having content based on the commerce object associated with the link.

18. The process of claim 17 wherein the look and feel description comprises data defining the appearance of the top and left side of at least some of the web pages of the first website.

19. The process of claim 17 wherein the look and feel description comprises data defining the appearance of the header and footer of at least some of the web pages of the first website.

20. The process of claim 17 wherein the look and feel description comprises data defining a set of navigational links, used on at least some of the web pages of the first website, each of which links link to specific web pages of the first website.

30

21. The process of claim 17 wherein the look and feel description comprises data defining:

- a) a logo associated with and displayed on at least some of the web pages of the first website;
- b) a color scheme used on at least some of the web pages of the first website;
- c) a page layout used on at least some of the web pages of the first website; and
- d) navigational links, used on at least some of the web pages of the first website, each of which links link to specific web pages of the first website.

22. The process of claim 17 wherein storing a look and feel description associated with a first website in a data store associated with a second website comprises designing a first website, identifying look and feel descriptions associated therewith, and storing the identified look and feel descriptions in the data store associated with the second website.

23. The process of claim 17 wherein the commerce object is a set of product categories and further comprising accepting search parameters through the composite web page and using said parameters to search for specific products within the product categories.

24. The process of claim 17 further comprising storing at the second website data concerning a plurality of commerce objects.

25. The process of claim 24 further comprising contracting with merchants offering products or services for sale to include data concerning the commerce objects of said merchants at the second website.

26. The process of claim 17 further comprising, after part (c), responsive to an indication received from the visitor computer of a desire to purchase a product or service identified in the content based on the commerce object and served in the composite web page, capturing billing information from the visitor computer and passing captured billing information to a merchant offering the indicated product or service.

27. The process of claim 17 wherein the commerce object is a set of product categories, each comprising a plurality of products or services, and further comprising:

- a) before serving the composite web page to the visitor computer:
  - i) contracting with merchants offering the products or services for sale to include data concerning the commerce objects of said merchants at the second website, and
  - ii) storing at the second website data concerning the plurality of products or services; and
- b) after serving the composite web page to the visitor computer:
  - i) accepting search parameters through the composite web page and using said parameters to search for specific ones of the plurality of products or services within the product categories, and
  - ii) responsive to an indication received from the visitor computer of a desire to purchase one of the plurality of products or services identified through the search, capturing billing information from the visitor computer and passing captured billing information to the merchant offering the indicated product or service.

\* \* \* \* \*

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 6,993,572 B2  
APPLICATION NO. : 10/461997  
DATED : January 31, 2006  
INVENTOR(S) : D. Delano Ross, Jr. et al.

Page 1 of 1

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 12 line 49 to Column 13 line 22 is identical to Column 13 line 23 to Column 13 line 63. This text in this section should appear only once.

Column 21 line 5, "In a preferred embodiment," should start a new paragraph.

In the claims:

Column 27 line 60 (Claim 1), after "website" insert --a--

Column 28 line 19 (Claim 6), change "arid" to --and--

Column 28 line 59 (Claim 10), change "sewed" to --served--

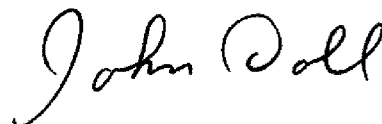
Column 29 line 10 (Claim 13), change "wit" to --with--

Column 29 line 13 (Claim 13), change "wit" to --with--

Column 29 line 45 (Claim 17), change "sewing" to --serving--

Signed and Sealed this

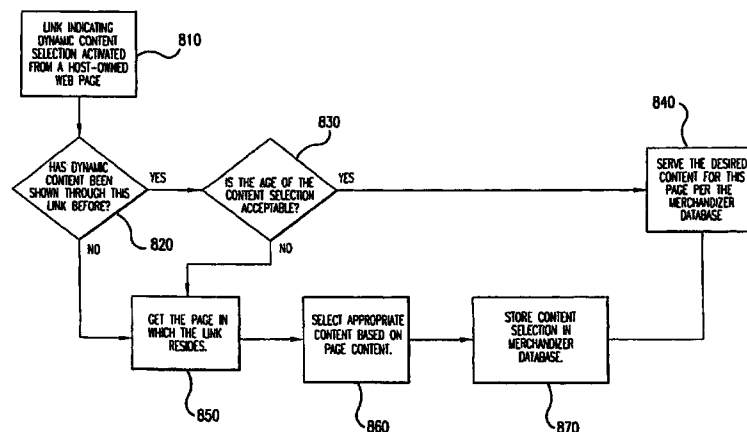
Twenty-fourth Day of February, 2009



JOHN DOLL  
*Acting Director of the United States Patent and Trademark Office*

(12) **EX PARTE REEXAMINATION CERTIFICATE** (7626th)

<b>United States Patent</b>	(10) <b>Number:</b> <b>US 6,993,572 C1</b>
<b>Ross, Jr. et al.</b>	(45) <b>Certificate Issued:</b> <b>Jul. 20, 2010</b>



US 6,993,572 C1

**1**  
**EX PARTE**  
**REEXAMINATION CERTIFICATE**  
**ISSUED UNDER 35 U.S.C. 307**

NO AMENDMENTS HAVE BEEN MADE TO  
THE PATENT

**2**  
AS A RESULT OF REEXAMINATION, IT HAS BEEN  
DETERMINED THAT:  
The patentability of claims **1, 4, 5, 13** and **17-27** is con-  
5 firmed.  
Claims **2-3, 6-12** and **14-16** were not reexamined.

\* \* \* \* \*

US007818399B1

(12) **United States Patent**  
**Ross, Jr. et al.**

(10) **Patent No.:** **US 7,818,399 B1**  
(45) **Date of Patent:** **Oct. 19, 2010**

(54) **METHODS OF EXPANDING COMMERCIAL OPPORTUNITIES FOR INTERNET WEBSITES THROUGH COORDINATED OFFSITE MARKETING**

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(Continued)

(75) Inventors: **D. Delano Ross, Jr.**, Alpharetta, GA (US); **Daniel D. Ross**, Dunwoody, GA (US); **Joseph R. Michaels**, Marietta, GA (US); **William R. May**, Atlanta, GA (US); **Richard A. Anderson**, Powder Springs, GA (US)

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(Continued)

(73) Assignee: **DDR Holdings, LLC**, Dunwoody, GA (US)

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1007 days.

*Primary Examiner*—Patrice L Winder

(74) *Attorney, Agent, or Firm*—Louis J. Hoffman

(57) **ABSTRACT**

(21) Appl. No.: **11/343,464**

(22) Filed: **Jan. 30, 2006**

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(60) Provisional application No. 60/100,697, filed on Sep. 17, 1998.

(51) **Int. Cl.**  
**G06F 15/16** (2006.01)

(52) **U.S. Cl.** ..... **709/218; 709/215**

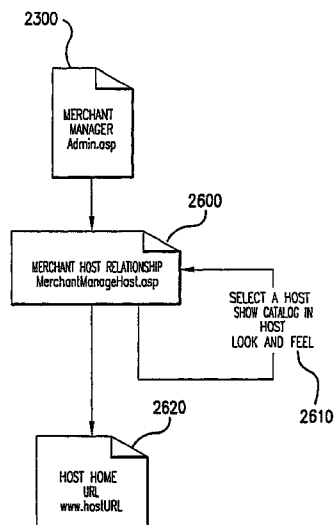
(58) **Field of Classification Search** ..... None  
See application file for complete search history.

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**26 Claims, 24 Drawing Sheets**





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U.S. Patent

Oct. 19, 2010

Sheet 1 of 24

US 7,818,399 B1

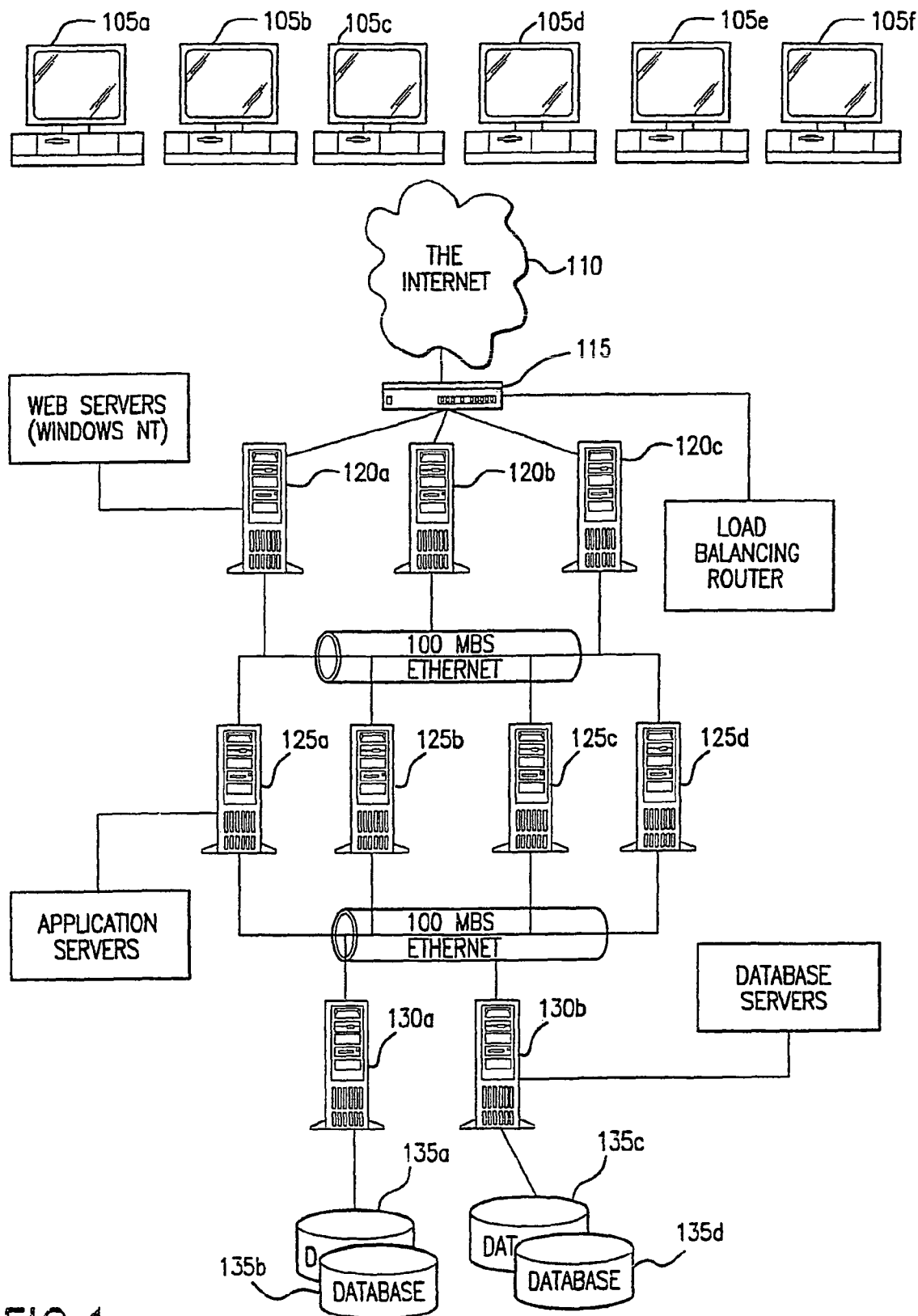


FIG. 1

U.S. Patent

Oct. 19, 2010

Sheet 2 of 24

US 7,818,399 B1

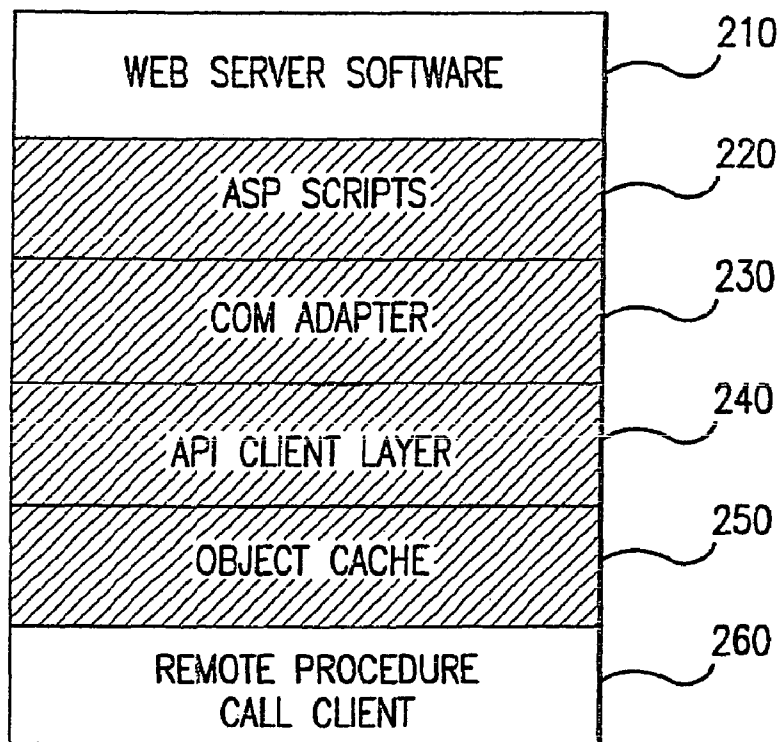


FIG. 2

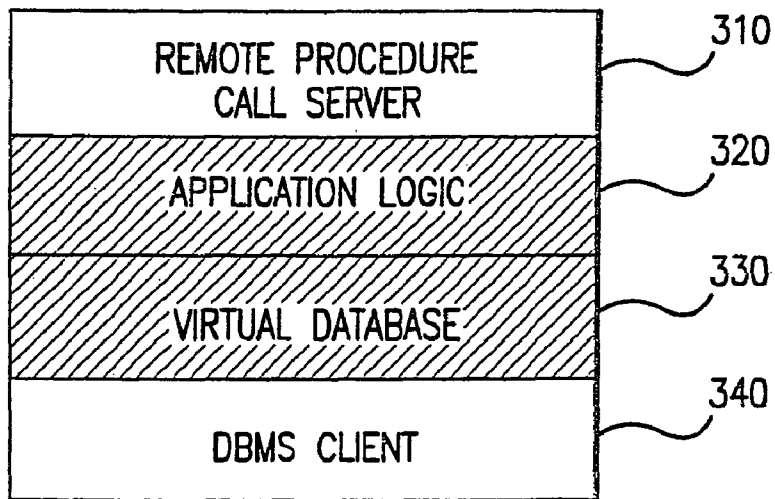


FIG. 3

U.S. Patent

Oct. 19, 2010

Sheet 3 of 24

US 7,818,399 B1

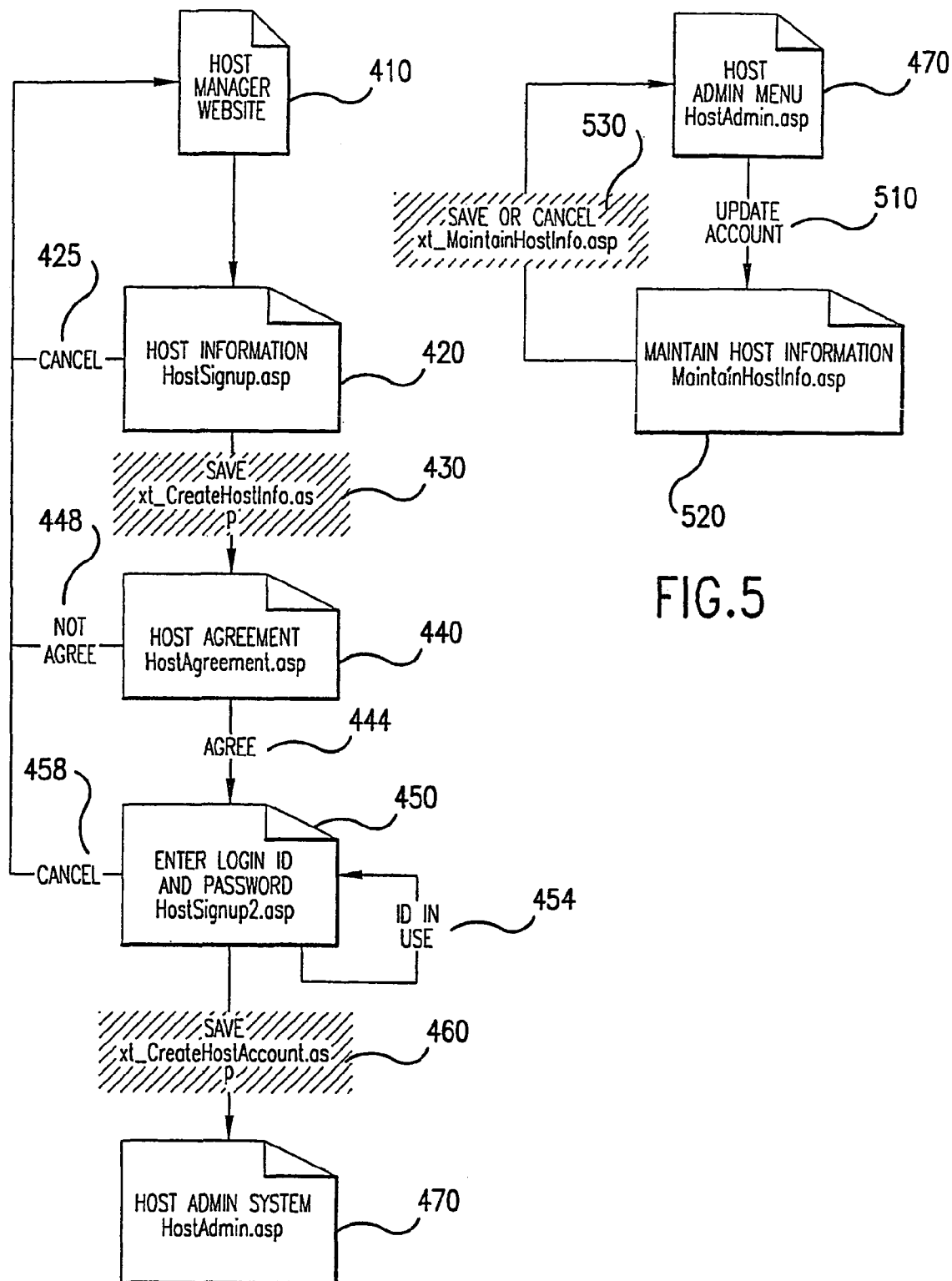


FIG.5

FIG.4

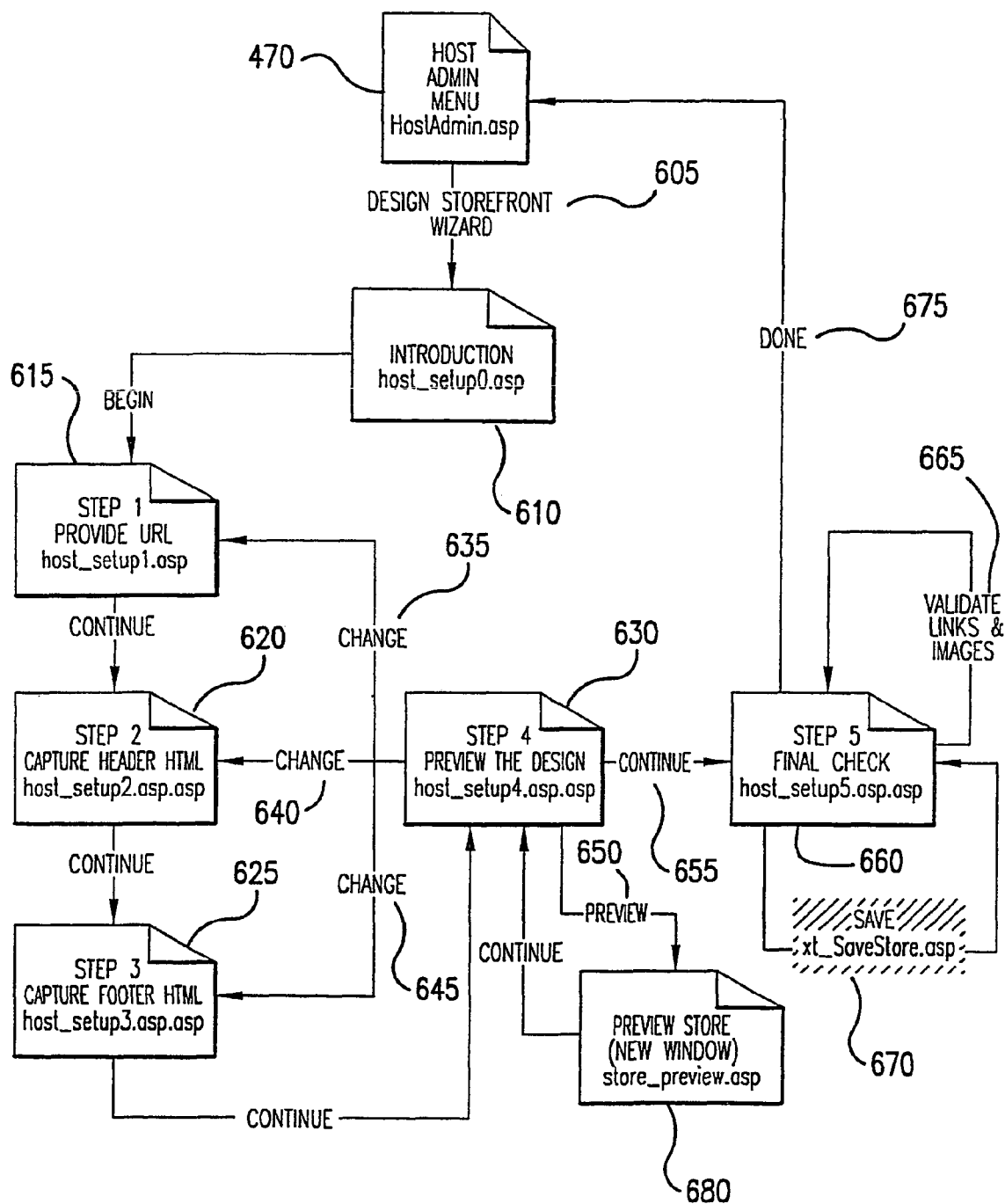


FIG. 6



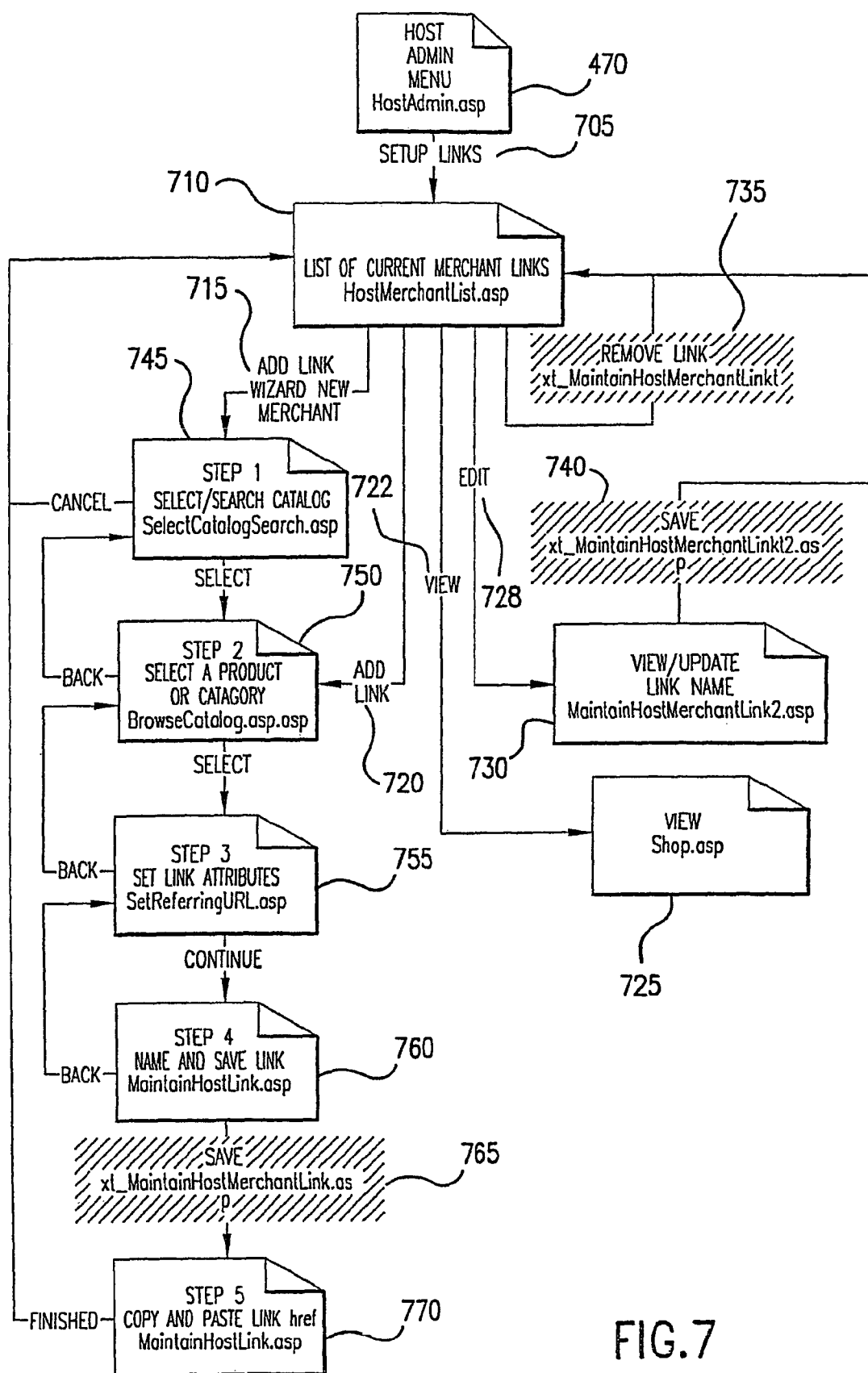


FIG.7

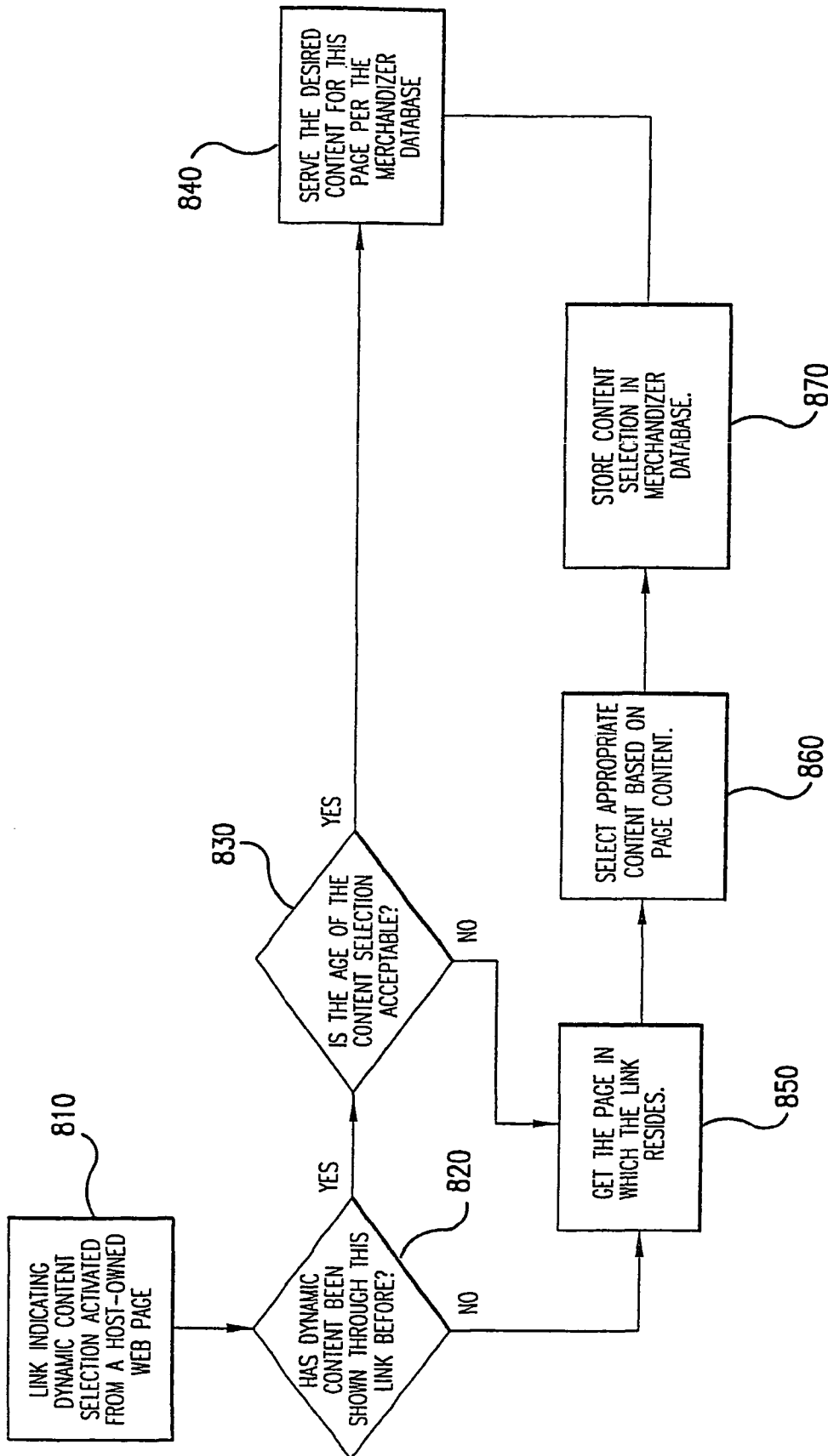


FIG. 8

U.S. Patent

Oct. 19, 2010

Sheet 7 of 24

US 7,818,399 B1

NEXCHANGE-MERCHANT MANAGER-UPDATE ACCOUNT-MICROSOFT INTERNET EXPLORER

FILE EDIT VIEW FAVORITES TOOLS HELP

BACK FORWARD STOP REFRESH HOME

SEARCH FAVORITES HISTORY MAIL PRINT

ADDRESS <http://216.0.58.3/MerchantAdmin/Admin.asp?MerchantSID=88661467> GO! LINKS >>

WORLD'S LARGEST ATHLETIC SHOE STORE  
WHERE THE 13th PAIR IS FREE  
JUST FOR FEET

justforfeet

WORLD'S LARGEST ATHLETIC SHOE STORE  
WHERE THE 13th PAIR IS FREE  
JUST FOR FEET

MERCHANT MANAGER

MAIN

MANAGE ORDERS EDIT PRODUCT/CATALOG GENERATE REPORTS REVIEW HOSTS UPDATE ACCOUNT FREQUENTLY ASKED QUESTIONS CONTACT US

QUICK SUMMARY OF RESULTS

SALES TO DATE: \$0.00

SALES THIS MONTH: \$0.00

QUICK REPORT: THIS MONTH GO!

SALES ARE GROSS SALES AND DO NOT INCLUDE ADJUSTMENTS

ANNOUNCEMENTS

YOU HAVE 0 NEW ORDERS  
YOU HAVE 0 ORDERS TO SHIP  
YOU HAVE 0 RETURNS TO PROCESS  
NUMBER OF HOSTS IN NETWORK: 0  
NUMBER OF BUYING 'LINKS': 0

NEXCHANGE NEWS

NEXCHANGE GOES THE EXTRA MILE AND MANAGES EVERY ASPECT OF YOUR AFFILIATE PROGRAM-FROM RECRUITING AFFILIATE WEBSITES AND GIVING THEM TOOLS THEY NEED TO SELL ALL THE WAY THROUGH PAYING THEM MONTHLY SALES COMMISSIONS. WE KEEP IT SIMPLE. YOU PRODUCE GREAT PRODUCTS. WE SELL THEM ALL ACROSS THE INTERNET. NEXCHANGE GIVES YOU CONTROL. YOU CHOOSE THE PRODUCT MIX, SET PRICES, AND DESIGN THE ONLINE CATALOG. YOU REACH NEW CUSTOMERS WITHOUT THE TRADITIONAL COSTS OF SALES. NEXCHANGE ONLY EARNS MONEY WHEN WE SELL YOUR PRODUCTS SUCCESSFULLY.

INTERNET

FIG. 9

U.S. Patent

Oct. 19, 2010

Sheet 8 of 24

US 7,818,399 B1

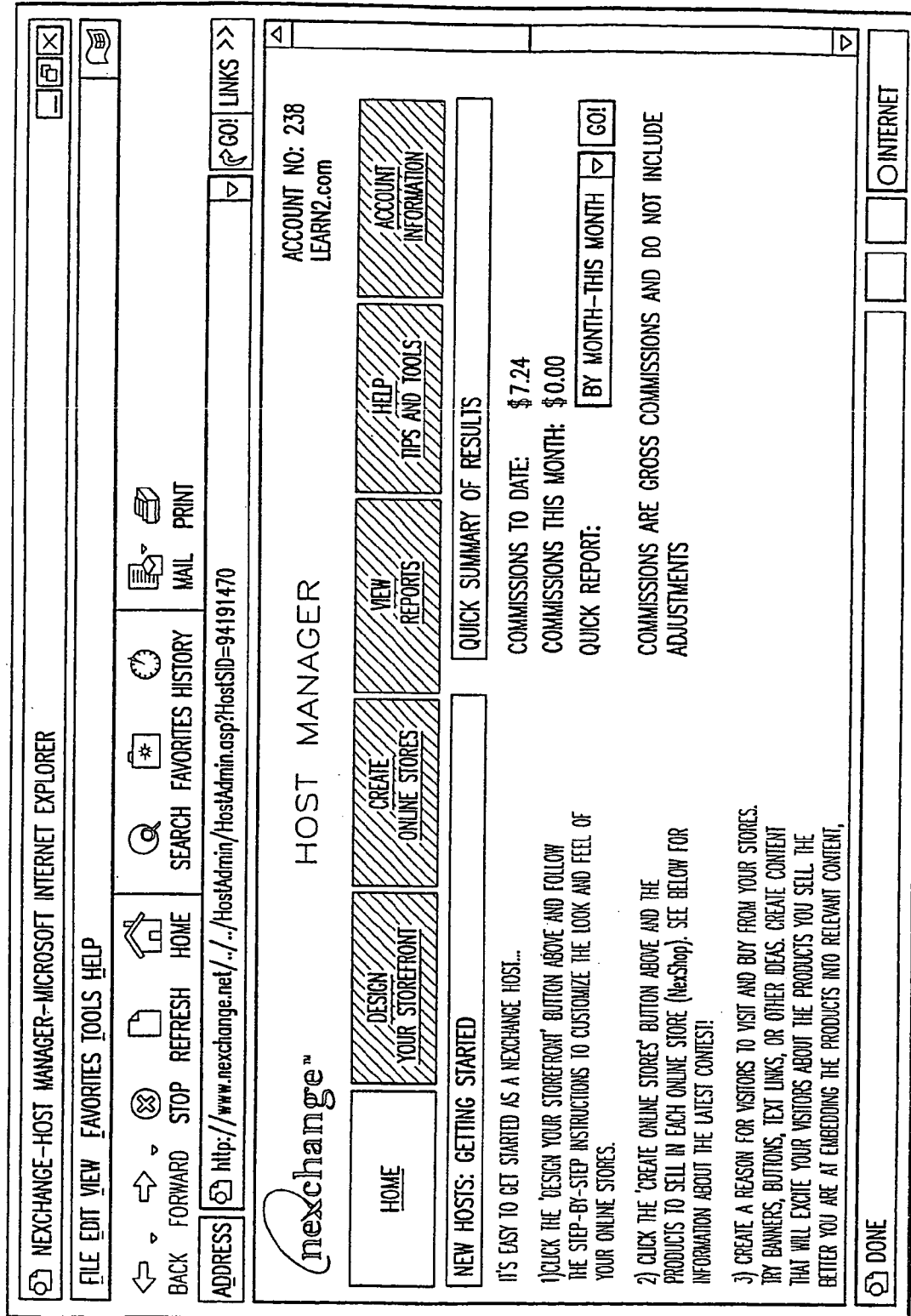


FIG.10

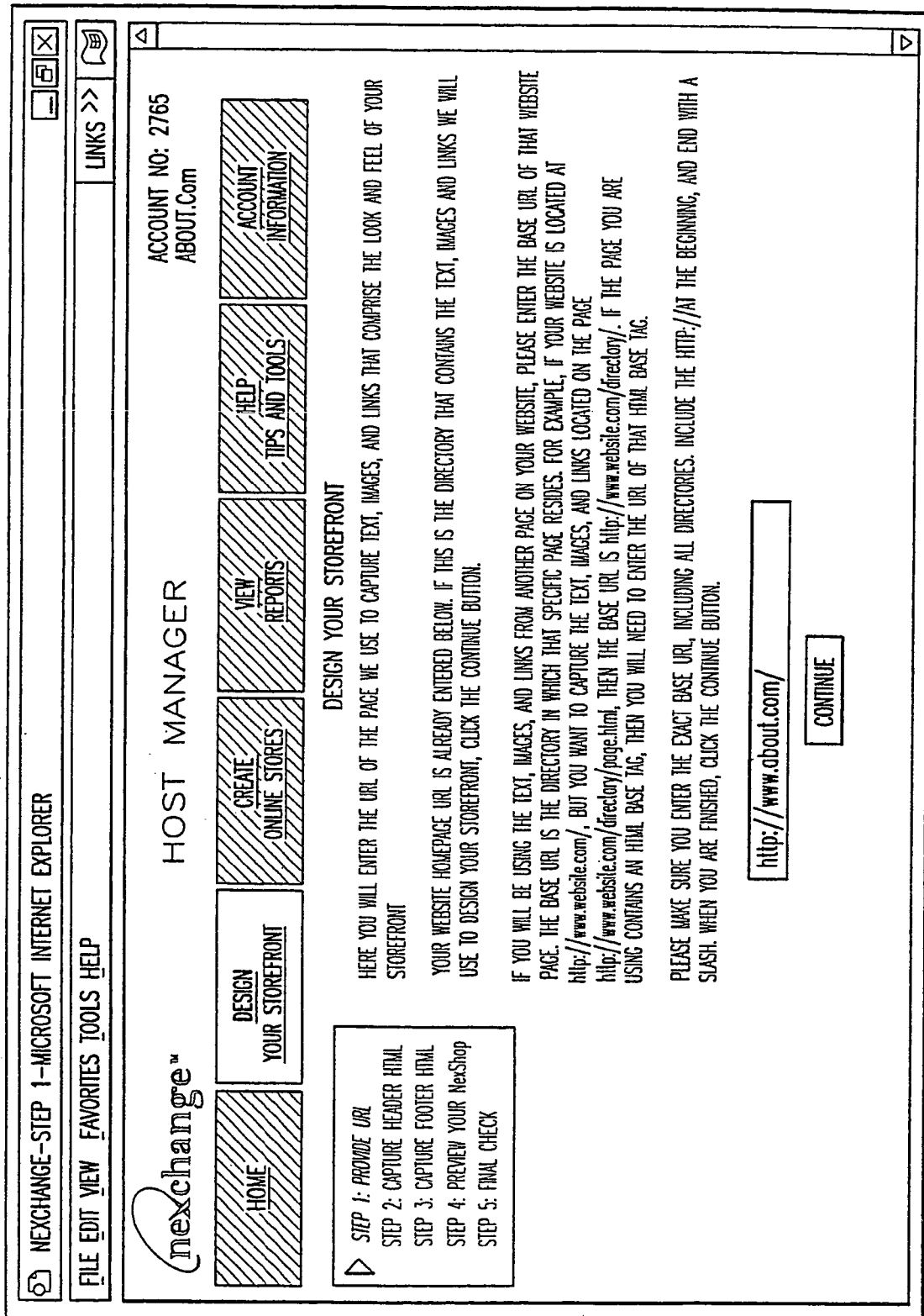


FIG. 11

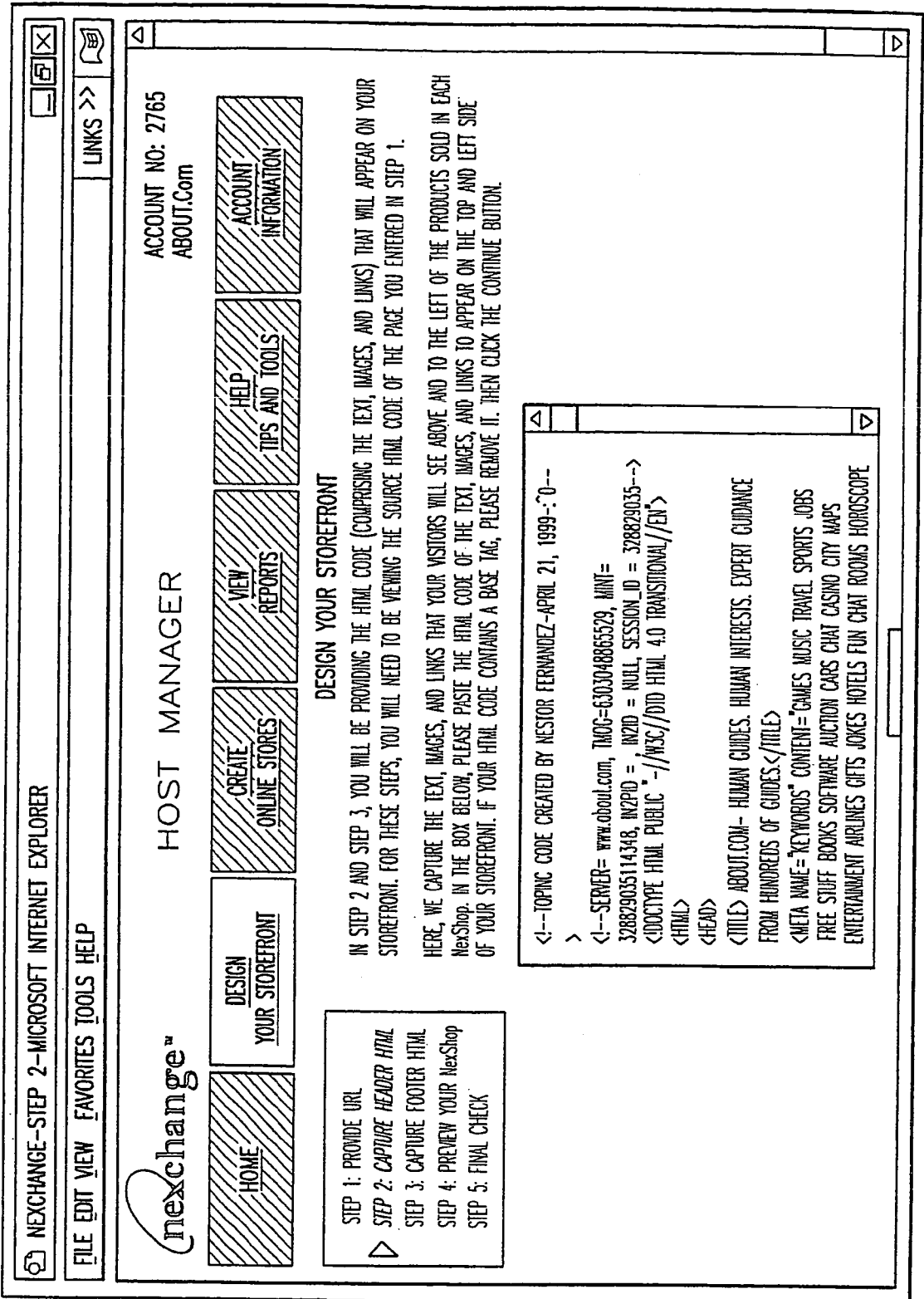


FIG. 12

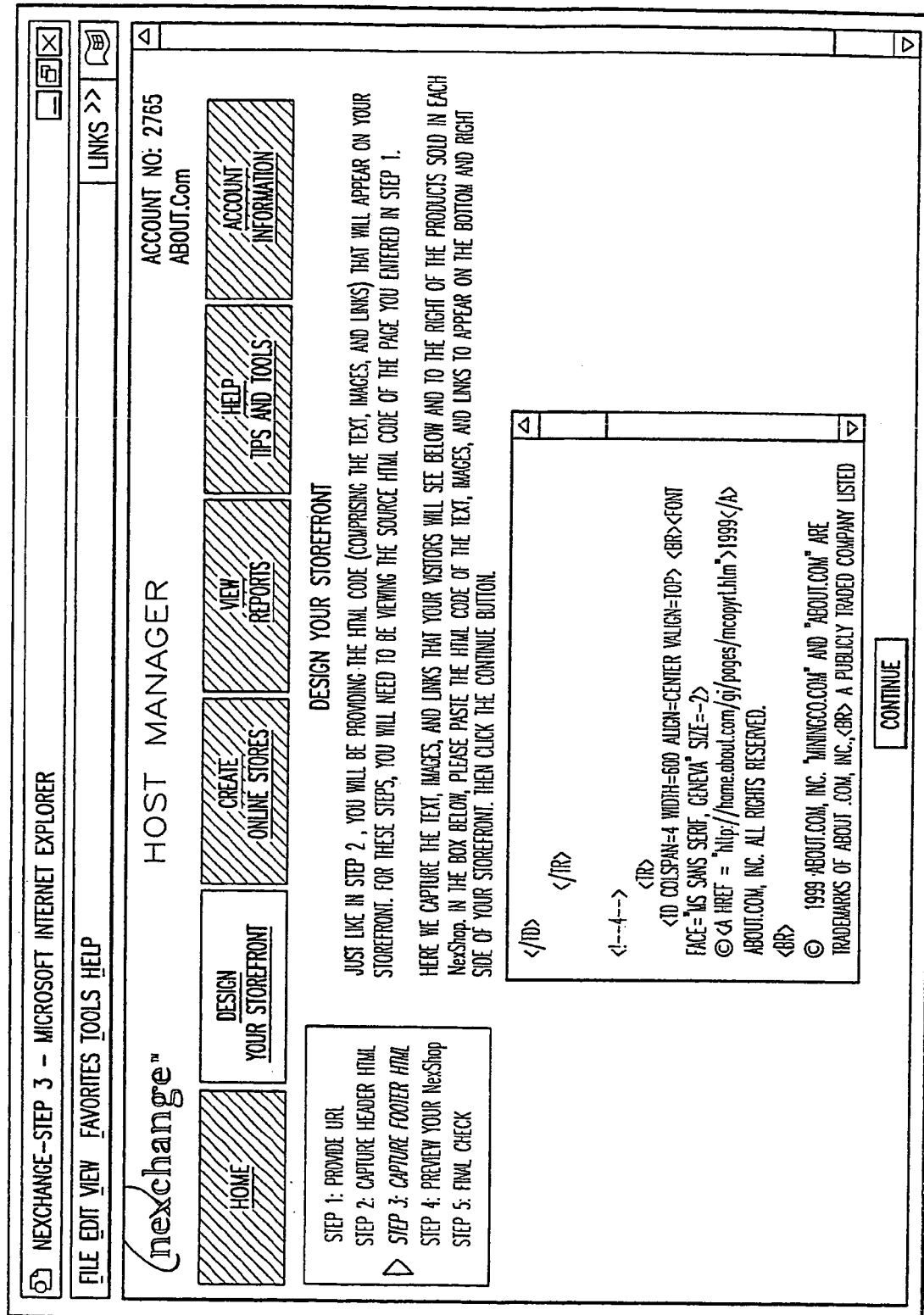


FIG. 13

U.S. Patent

Oct. 19, 2010

Sheet 12 of 24

US 7,818,399 B1

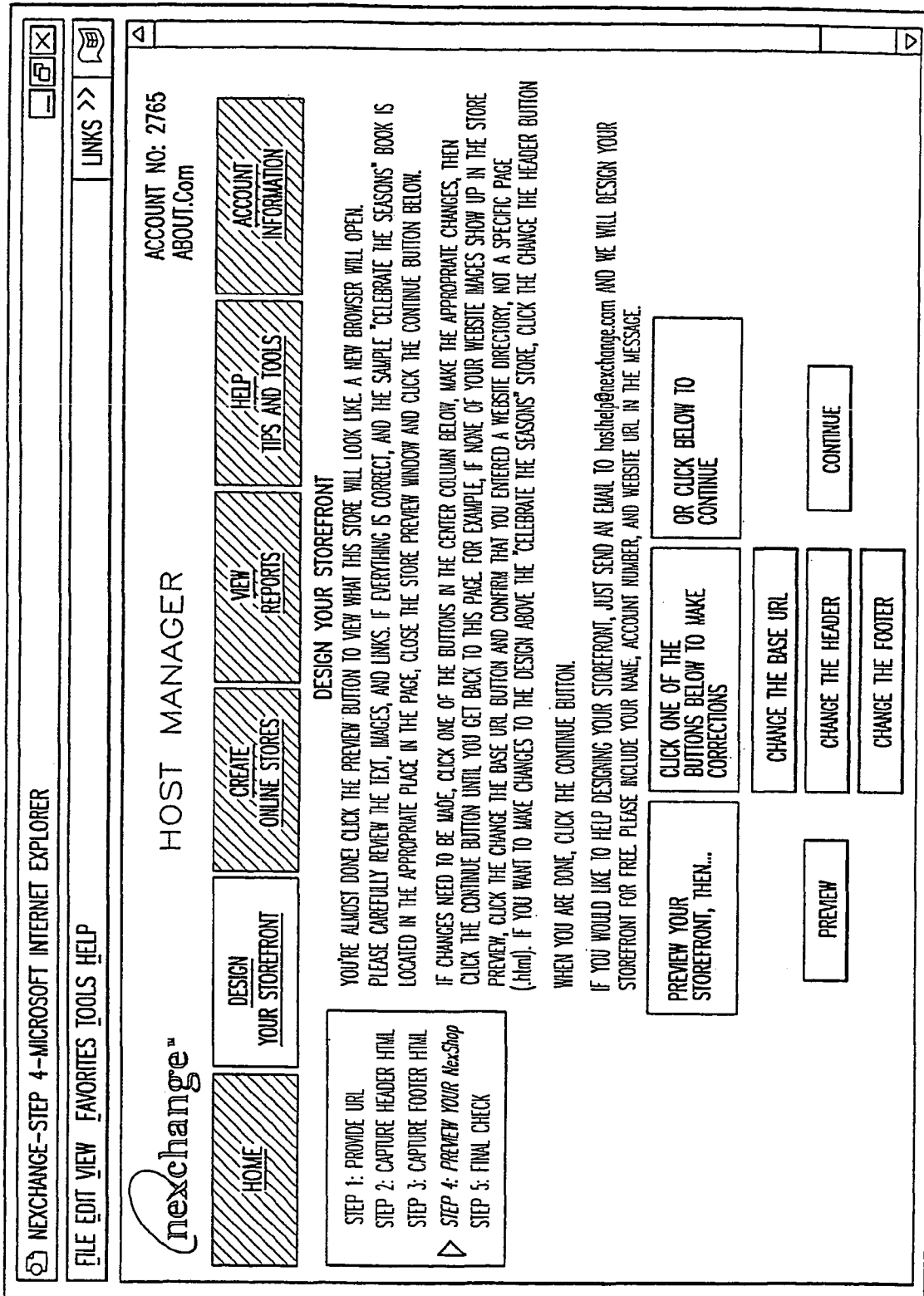


FIG. 14



U.S. Patent

Oct. 19, 2010

Sheet 13 of 24

US 7,818,399 B1

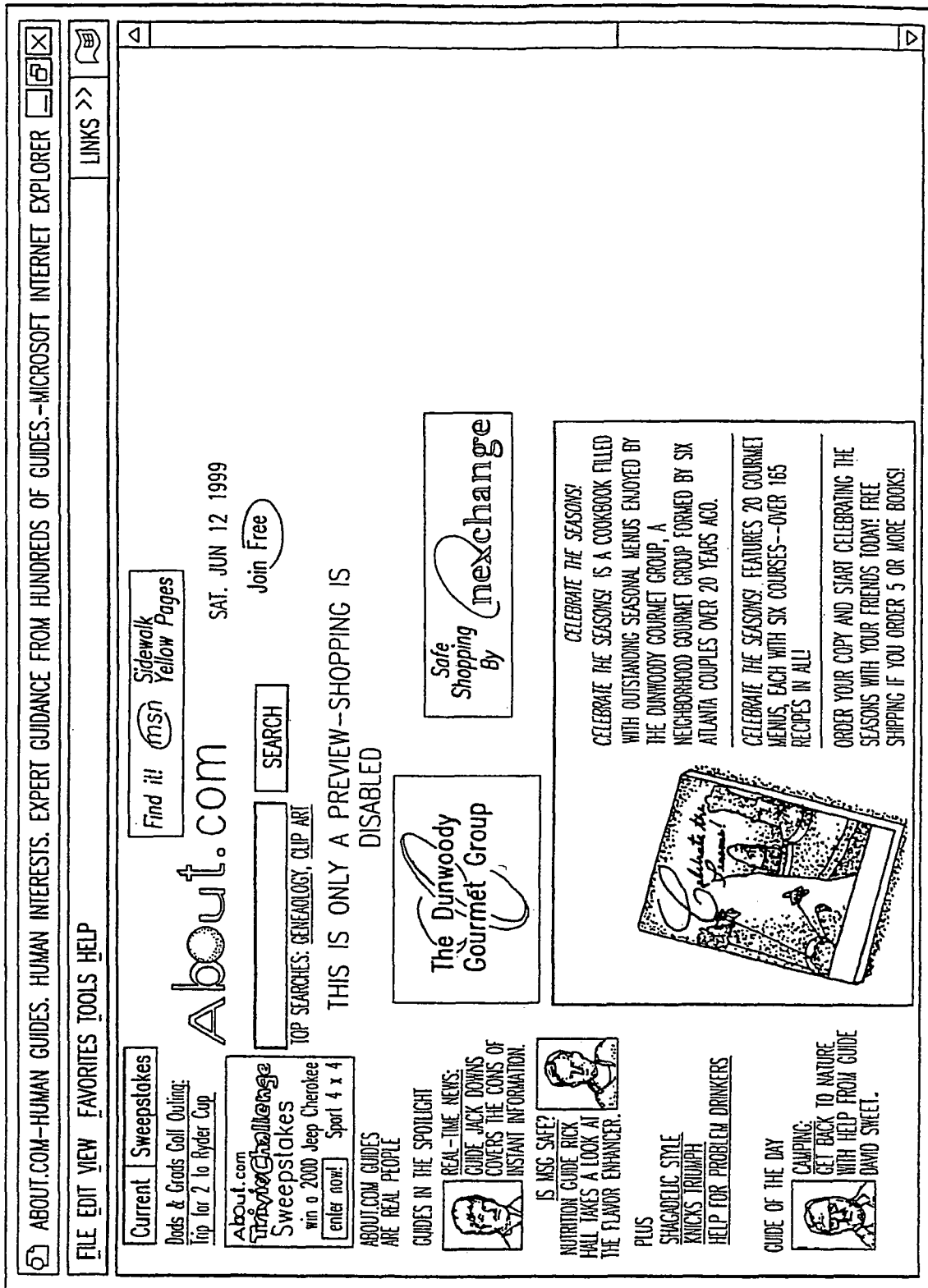


FIG.15

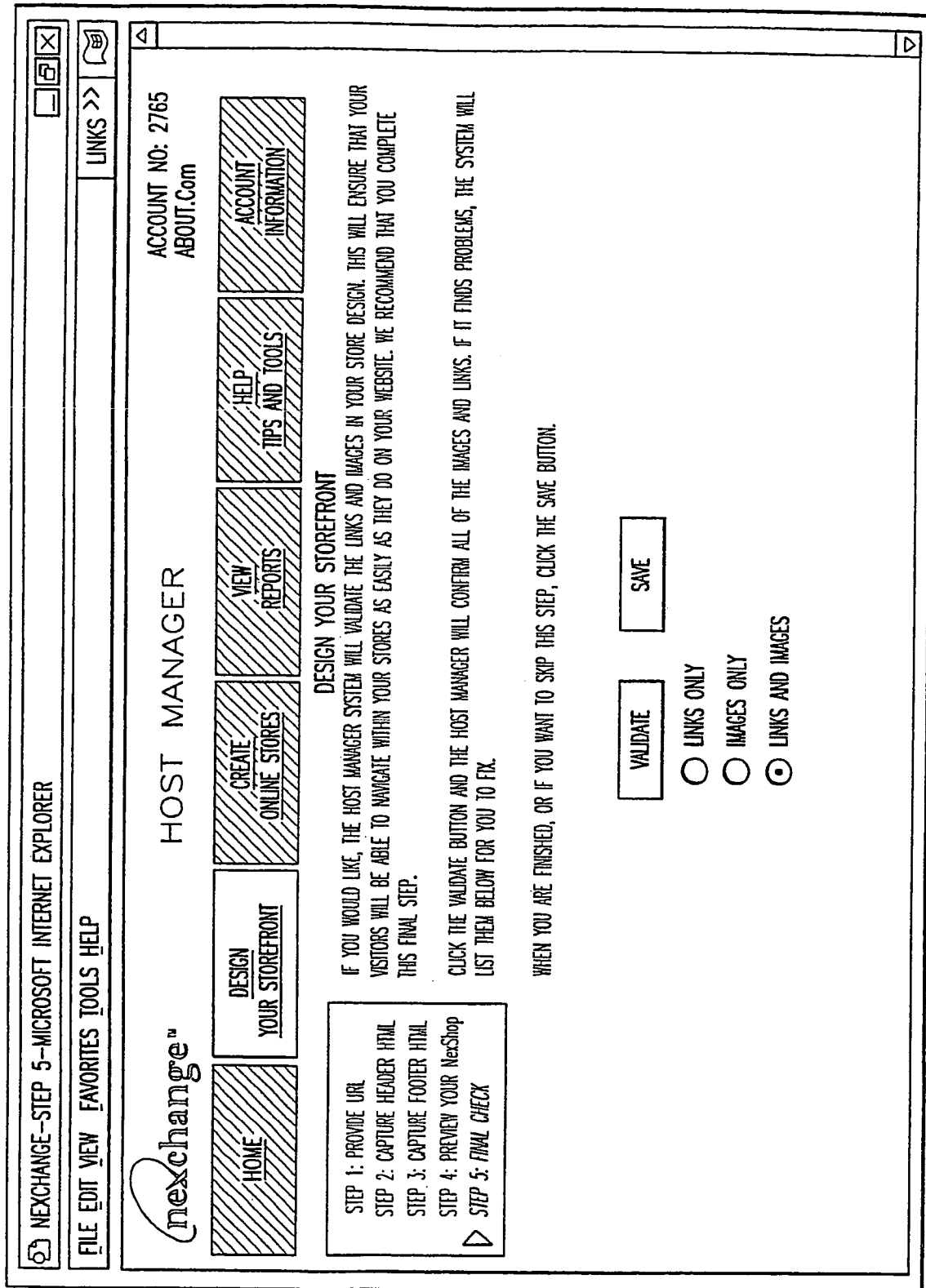


FIG.16

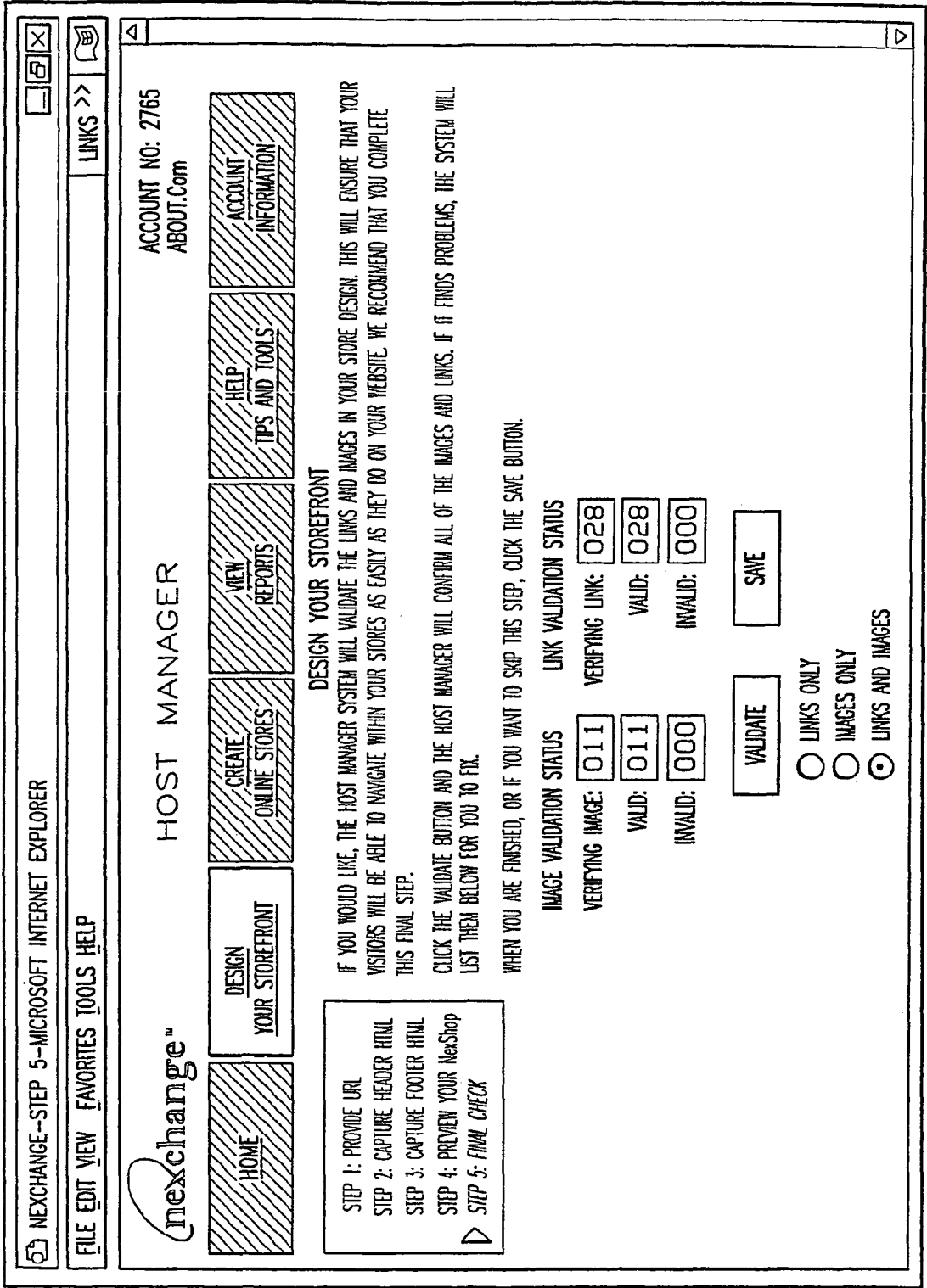


FIG.17

U.S. Patent

Oct. 19, 2010

Sheet 16 of 24

US 7,818,399 B1

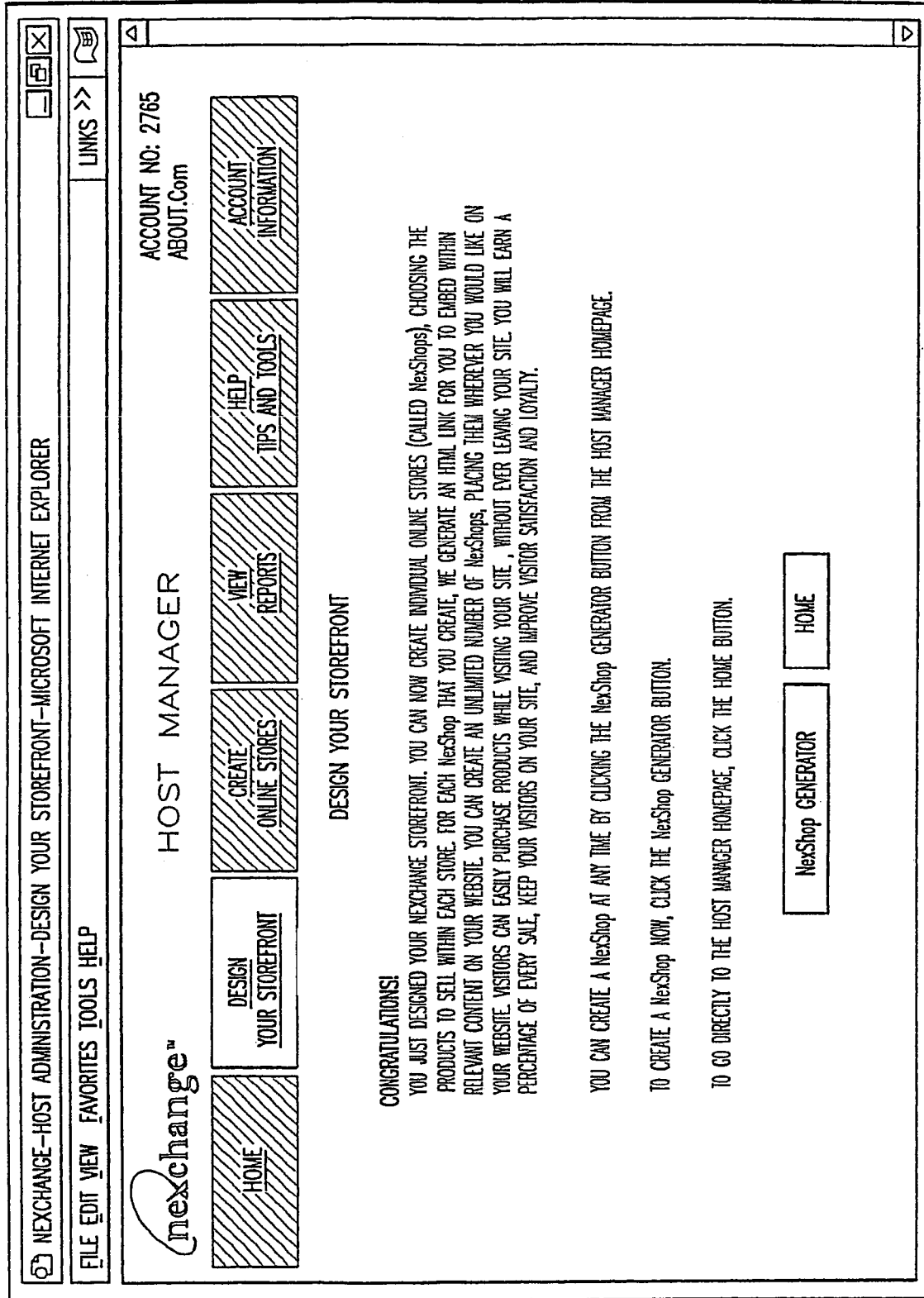


FIG.18

U.S. Patent

Oct. 19, 2010

Sheet 17 of 24

US 7,818,399 B1

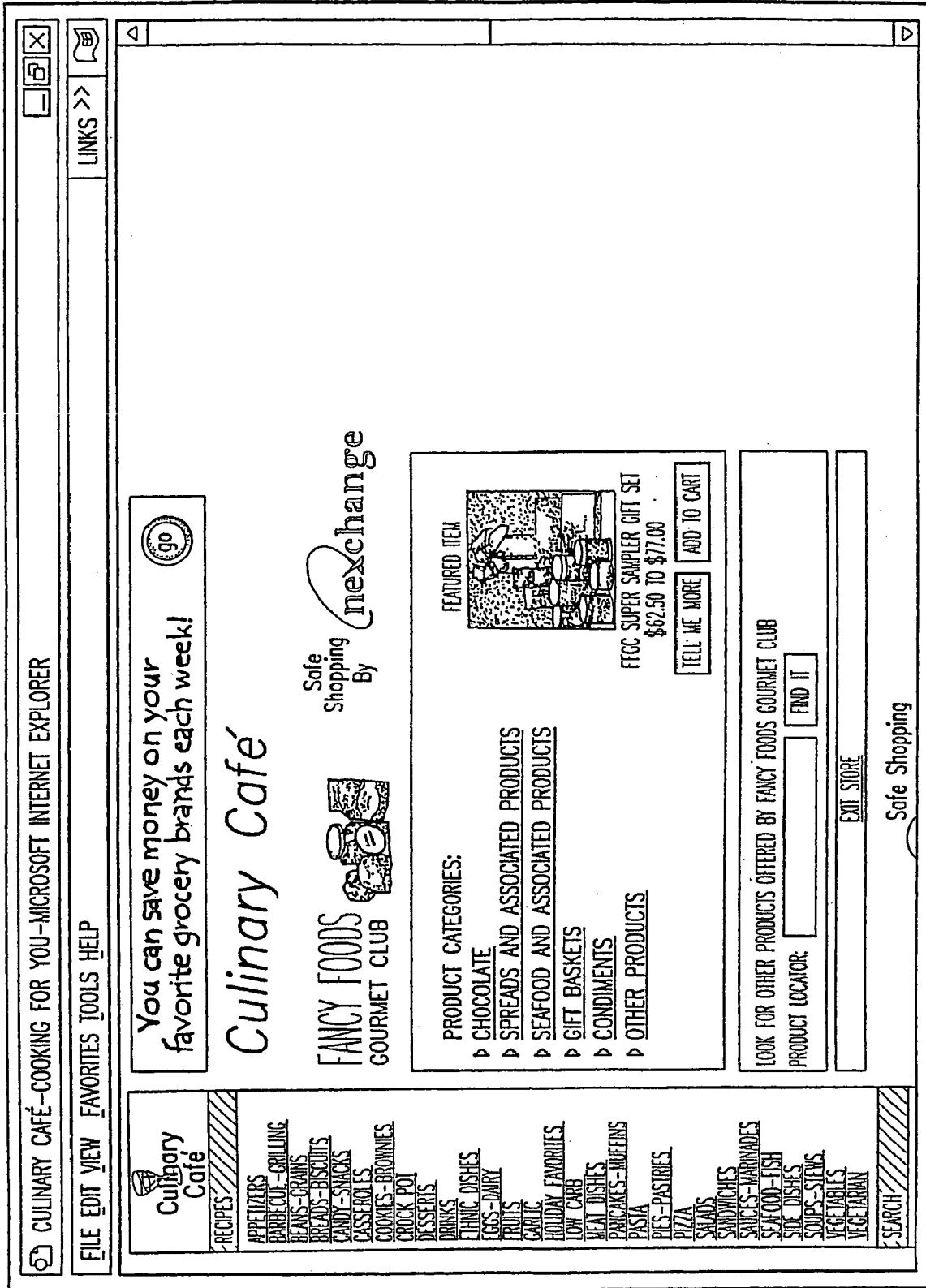


FIG. 19

U.S. Patent

Oct. 19, 2010

Sheet 18 of 24

US 7,818,399 B1

**NEXCHANGE-SYSTEM MANAGER-MAIN-MICROSOFT INTERNET EXPLORER**

FILE EDIT VIEW FAVORITES TOOLS HELP

BACK FORWARD STOP REFRESH HOME

SEARCH FAVORITES HISTORY

MAIL PRINT

ADDRESS <http://www.nexchange.net/NexchangeAdmin/NexchangeSID=94191470> GO! LINKS >>

**SYSTEM MANAGER**

9/16/99 2:06:46 PM

MAIN UTILITIES HOSTS MERCHANTS AGENTS FINANCE

SHOPPING STATISTICS

PENDING ORDERS: 1  
TOTAL SESSIONS: 361056  
TOTAL ORDERS: 349  
TOTAL SALES: \$23,370.09

HOST STATISTICS

TOTAL HOSTS: 6234  
PENDING: 6  
APPROVED: 5095  
DECLINED: 1133  
TOTAL COMMISSIONS: \$3,235.60

MERCHANT STATISTICS

MERCHANTS: 17  
HOST RELATIONSHIPS: 10761  
LINKS: 22713  
REVENUE: \$16,188.74

RETURNS

NEW: 3  
CANCELED: 2  
RETURNED: 4

UNTENDED ORDERS

GATEWAY LEARNING CORPORATION	1512	9/12/99 3:07:36 PM	OK
MPG MARKETING, INC.	1468	9/2/99 5:08:19 PM	OK
MPG MARKETING, INC.	1469	9/2/99 6:29:06 PM	OK
MPG MARKETING, INC.	1478	9/4/99 4:48:16 PM	OK
MPG MARKETING, INC.	1480	9/4/99 8:32:31 PM	OK
MPG MARKETING, INC.	1482	9/5/99 11:31:36 AM	OK
MPG MARKETING, INC.	1486	9/7/99 10:16:18 AM	OK
MPG MARKETING, INC.	1501	9/9/99 11:56:57 PM	OK
MPG MARKETING, INC.	1507	9/11/99 9:24:40 PM	OK
MPG MARKETING, INC.	1509	9/12/99 9:10:56 AM	OK

DONE INTERNET

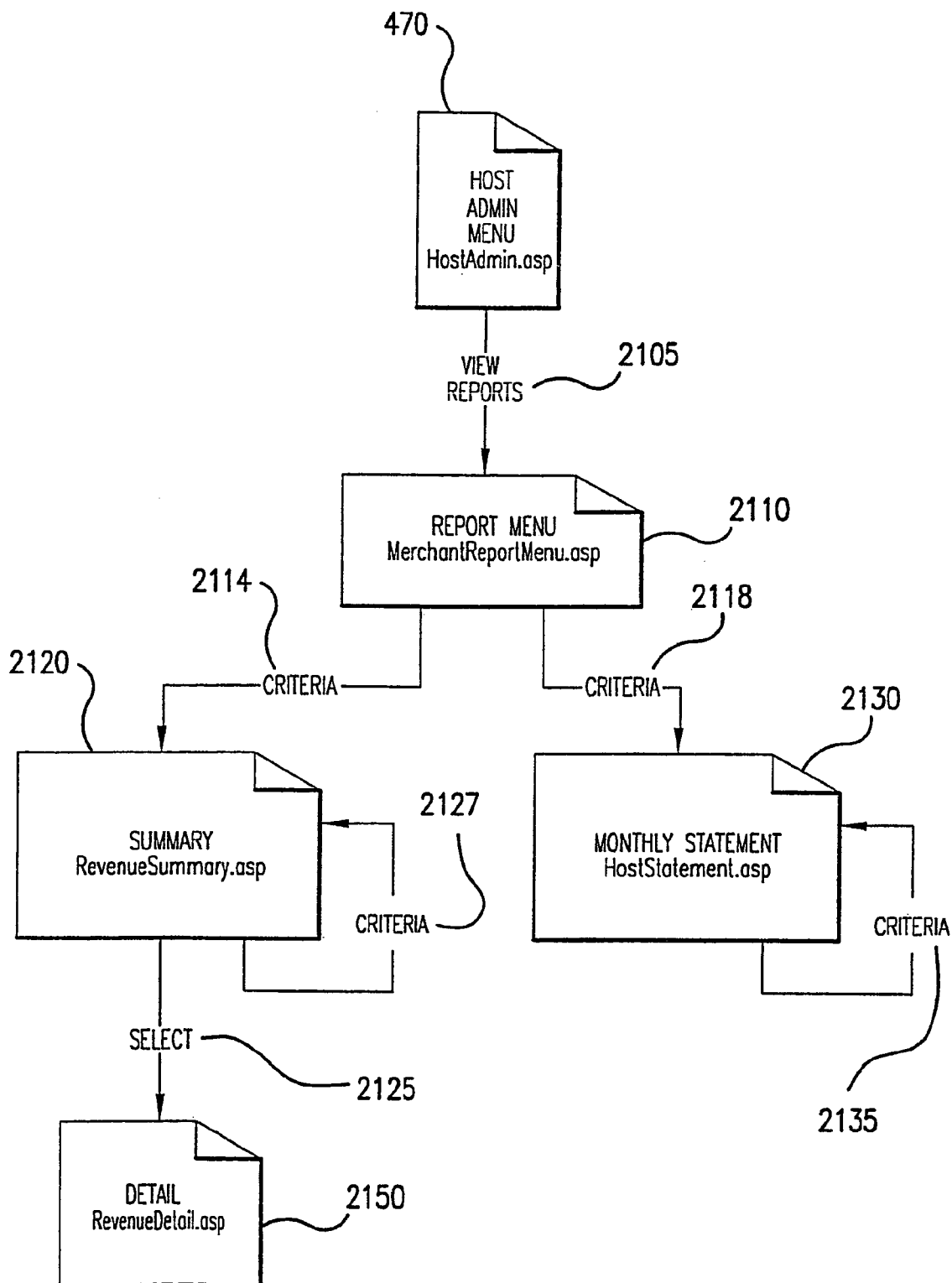
FIG. 20

**U.S. Patent**

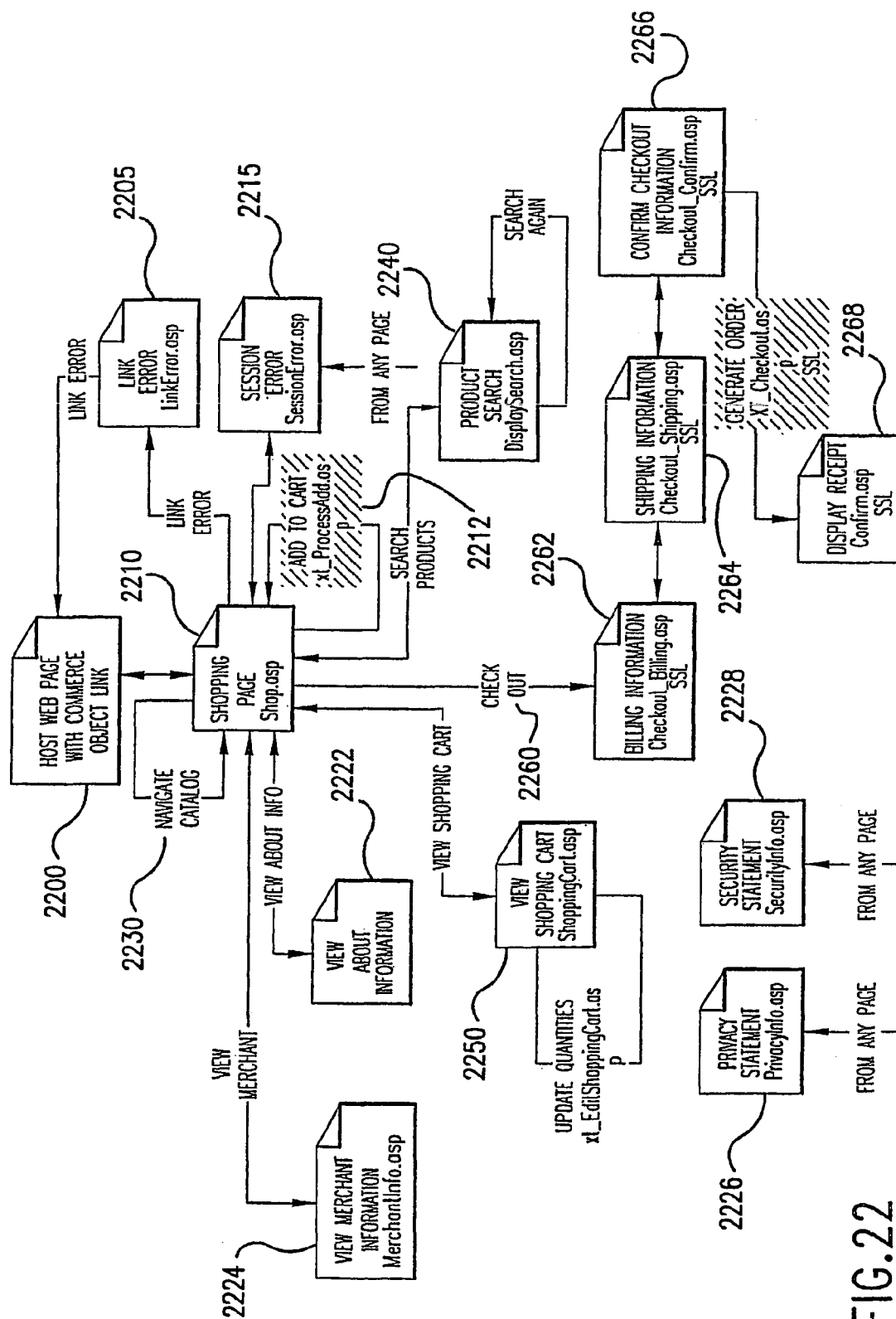
Oct. 19, 2010

Sheet 19 of 24

**US 7,818,399 B1**



**FIG. 21**



**FIG. 22**



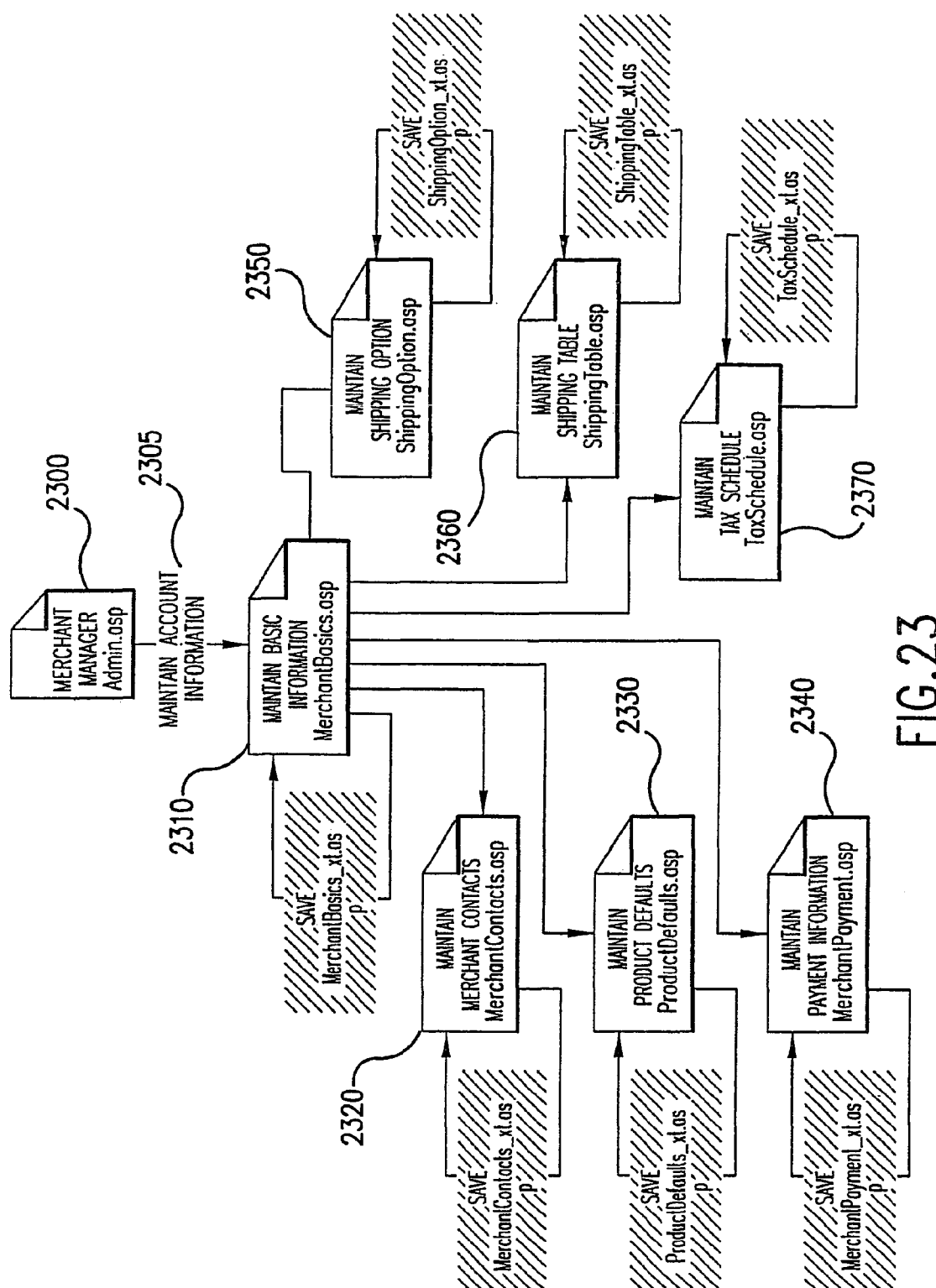
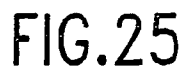


FIG. 23







The affiliate commerce system and method of the present invention represents a new paradigm of co-marketing on the Internet. Not only does the present invention provide its Hosts with the added value and incremental revenues of traditional affiliate programs, but the company also enables Hosts to control the customer experience before, during, and after the purchase transaction. At the same time, Merchants receive the same benefits as with older affiliate programs, i.e., increased marketing potential, incremental sales, and new customer relationships, but without the restrictive limitations of affiliate programs—the loss of hard-won visitor traffic.

Additionally, the present invention can actually obviate the need for some merchants to invest in their own unique Internet presence. By using the present invention as their primary online sales channel, these Merchants can focus on product development, production, and order fulfillment and leave the exploration of the Internet to experts. The resulting ongoing cost savings and operational efficiencies magnify the potential benefits of the Internet while reducing the initial costs.

According to the present invention the look and feel of each participating Host is captured and stored. Hosts may include links to selected products or product categories within pages residing on the Hosts' website. Upon actuation of such a link by a visitor of the Host website, a page is presented to the visitor incorporating a replica of the Host's look and feel directed to the sale of the selected products or product categories.

The look and feel of a host is captured and stored by receiving an identification of an example page of a target host. The identified page is retrieved. The look and feel elements of the page are identified, and these elements are stored for future use in generating outsourced transparent pages, pages served by a server other than the host but with the host's look and feel. Such pages give the viewer of the page the impression that she is viewing pages served by the host.

The links included by the host directed to the outsource provider need not be statically linked to a particular product or product category. Such links may direct the outsource provider to dynamically select content to serve within the host's look and feel. This content may be selected based upon a contextual analysis of the page which includes the link. Further, the dynamic content need not be limited to products or product categories but may include any content within the system's data store that is amenable to contextual correlation with content in the page containing the link.

A cost effective, scalable architecture may be used to serve dynamically constructed pages such as those served by the e-commerce outsource provider. This architecture includes three levels: a Web server layer, an application server layer and a database server layer.

The Web server layer provides a front end presentation layer for interacting with end users. This layer may consist of one or more interchangeable low cost server systems. Any request from an end user may be fielded by any system within the layer. The selected system can contact any application server within the application layer to provide processed data for use in responding to the end user request.

The application layer supports interacting with the database server level to acquire needed data and processing it prior to presentation by the Web server layer. As with the Web server layer, this layer may consist of one or more interchangeable low cost server systems. Any Web server system may submit a request to any application server. The application server includes processing functionality suitable for the types of pages to be dynamically constructed.

The database server layer supports low level management of data used in dynamic page construction. The data store across the one or more low cost server systems is seamlessly viewed as an integrated whole. As a consequence, any database server within the layer can field any request for data submitted by an application server.

### BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 depicts a typical hardware architecture implementing the present invention.

FIG. 2 illustrates the software architecture of the Web server layer.

FIG. 3 illustrates the software architecture of the application server layer.

FIG. 4 is a flow chart of the pages and procedures in the host signup process.

FIG. 5 is a flow chart of the pages and procedures in the host account information maintenance process.

FIG. 6 is a flow chart of the pages and procedures in the host look and fee capture process.

FIG. 7 is a flow chart of the pages and procedures in the host link generation process.

FIG. 8 is a flow chart of the dynamic content selection and presentation process.

FIG. 9 is a screen capture of a Merchant Manager page in a preferred embodiment.

FIG. 10 is a screen capture of a Host Manager page in a preferred embodiment.

FIGS. 11-18 are screen captures of the page in a preferred embodiment of a look and feel capture process.

FIG. 19 is a screen capture of a typical e-commerce supported page served in a preferred embodiment.

FIG. 20 is a screen capture of a System Manager page in a preferred embodiment.

FIG. 21 is a flow chart of the pages and procedures in the host view reports process.

FIG. 22 is a flow chart of the pages and procedures in the shopping process.

FIG. 23 is a flow chart of the pages and procedures in the merchant account maintenance process.

FIG. 24 is a flow chart of the pages and procedures in the merchant catalog maintenance process.

FIG. 25 is a flow chart of the pages and procedures in the merchant view reports process.

FIG. 26 is a flow chart of the pages and procedures in the merchant view hosts process.

## DETAILED DESCRIPTION OF THE INVENTION

A preferred embodiment of the invention is now described in detail. Referring to the drawings, like numbers indicate like parts throughout the views. As used in the description herein and throughout the claims that follow, the meaning of “a,” “an,” and “the” includes plural reference unless the context clearly dictates otherwise. Also, as used in the description herein and throughout the claims that follow, the meaning of “in” includes “in” and “on” unless the context clearly dictates otherwise.

A typical embodiment of the present invention will include a data store including a look and feel description associated with a host website, a communications link to a visitor computer, and a processor. The processor performs the tasks of capturing a look and feel description associated with a host website, storing the captured look and feel description in the data store, providing the host website with a link that link correlates the host website with a commerce object for inclusion within a page on the host website and which, when activated, causes the processor to serve an e-commerce supported page via the communication link with a look and feel corresponding to the captured look and feel description of the host website associated with the provided link and with content based on the commerce object associated with the provided link. The Internet serves as the communication link to visitor computers.

In a preferred embodiment as exhibited by FIG. 1, the duties of the processor are split among several computer systems **120a-120c**, **125a-125d**, **130a-130b**. The data store may be implemented through a database system **130a-130b**, **135a-135d**. The Internet **110** serves as the communication

## US 7,818,399 B1

5

link to visitor computers **105a-105f**. In this preferred embodiment, the system utilizes multiple inexpensive computer systems at every level of the architecture. Routing between levels will automatically distribute the load amongst the functioning computers. Increasing throughput becomes a matter of adding more computers, not scaling up the existing ones. This arrangement also provides fault tolerance since the failure of one server will not incapacitate the system as long as another server providing the same service is alive. This approach also permits the distribution of servers geographically. A router **115** may also provide further load balancing.

The tasks performed by the processor may utilize a variety of underlying software technology. In a preferred embodiment, the software architecture can be divided into 3 tiers: web server, application-server and database-server. Each tier is comprised of a number of software layers.

#### Web Server Tier

The Web Server tier accesses application functionality by calling a single "Request" Application Programming Interface (API). The API will take a Document Object Model (DOM) (as specified by W3C in <http://www.w3.org/TR/REC-DOM-Level-1>, which is expressly incorporated herein by reference in its entirety) object as a parameter and return a DOM object as the response. The request will be relayed to the application server tier where a dispatching method will unpack the request object, inspect it, invoke the desired method, and send back the response object. This approach means that new functionality becomes available as soon as the application server is upgraded. It is not necessary to develop a set of "stubs" that mirror the new API call. This is a major advantage because new functionality in the application tier can be exploited immediately simply by modifying the Active Server Page (ASP) scripts. No web server resident Dynamic Link Libraries (DLLs) need to be upgraded so the server does not need to be shut down. The web server tier will typically run on server computers **120a-120c** having a multitasking operating system such as Windows NT from Microsoft or other suitable operating system software. The Web Server tier contains the following layers as illustrated in FIG. 2:

**Web Server Software 210**. In a preferred embodiment, IIS by Microsoft is the server software. It supports serving side scripting using the VBScript scripting language.

**ASP Scripts 220**. All HTML content is rendered by ASP server scripts. The ASP scripting environment can interact with software modules written to Microsoft's COM specification.

**COM Adapters 230**. A set of COM wrappers provides the bridge between the ASP scripts and other elements of the system. The wrappers provide the necessary data conversions but do not contain any substantial functionality. The wrappers are not application specific.

**API Client Layer 240**. The API Client Layer consists of the very thin "request" API described above. This layer cooperates with the Object Cache layer. For example, before retrieving a catalog from the application layer, this layer may check to see if the requested catalog is already in the object cache.

**Object Cache 250**. The object cache contains the responses to previously submitted requests. All items in the cache are marked with an expiration time that is set at the time they are originally retrieved. The purpose of this layer is to reduce the load on the application tier.

**Remote Procedure Call Client 260**. The Remote Procedure Call Client provides connectivity to the application tier. It also provides request routing. In the event of application server failure, this client will automatically reconnect to a working server. This piece of software is not application dependent. In a preferred embodiment, the

6

DBMS Component Server Client is the Objectstore Component Server Client (OCSC).

In a preferred embodiment, the Web server layer supports the following four Web interface modules. In a preferred embodiment, these modules are encoded with ASP to generate appropriate HTML and Javascript. The four modules are as follows:

#### 1. Merchant Manager

The Merchant Manager is the "Control Center" for Merchants. This module allows the merchant to maintain their products, catalogs, contact information, track orders, process returns, run reports, etc.

A merchant representative must login before performing any system activities. Any valid merchant user will be able to perform all possible actions on the merchant to which it is related. Only registered merchants will have a valid account. An account for a merchant is established when the merchant registers with the system. A merchant representative may initiate registration via a web interface. The signup process must collect basic merchant information, including the information necessary to pay the merchant, and a password, which will be used to create a user account for the merchant. Once the merchant is approved (this may be automatic), the merchant will be sent an email containing a unique user id which can be used to login to the system.

When a representative logs in, she is taken directly to the Merchant Manager as seen in FIG. 9 and assigned a Merchant Session ID (Merchant SID). All pages within the merchant system must retrieve the MerchantSID from the HTTP request and validate it. If the session does not validate, the representative is taken back to the Login screen.

This module contains the following submodules:

#### Account Information

A merchant representative will be able to maintain the basic merchant profile, which includes the information needed to pay the merchant, the merchant's password, and the merchant's shipping policy information. FIG. 23 depicts the pages and procedures in a typical merchant account maintenance process. The representative selects to maintain account information **2305** from the Merchant Manager page **2300** leading to the display of the a basic information modification page **2310**. Each modifiable information type could be altered through a designated page available through the basic information page **2310**. Each such page could provide functionality to save any changes made to the particular page.

This sub-module allows a merchant to maintain the following types of information:

Basic information **2310**—name, description, address, logo

Contacts **2320**—for admin, finance, returns, support, order notification

Product Defaults **2330**—price labels, unit of weight, display options

Payment info **2340**—check or ACH, payee info, bank info

Shipping Option **2350**—by price, items, weight, other or NA

Shipping Table **2360**—maintain shipping methods and prices

Tax Schedule **2370**—set tax rate for states in which taxes are collected. This may be automated in the future.

#### Products and Catalogs

Here the merchant can both maintain products and arrange them into catalogs. Example product attributes include:

name

description

attributes—such as size, color, etc.

8

attribute includes a collection of options such as sizes or colors. If she selects to add a new attribute **2426**, a new attribute creation page is presented **2428**. Upon creation of the new attribute, the new attribute is saved, and the representative proceeds to the attribute edit page **2430**. From this page, she may choose to save or cancel the current attribute edit **2435**.

If the representative chooses to edit by catalog or category **2442**, she is presented a page allowing selection of catalogs or categories **2440** through navigating the catalog/category hierarchies **2444**. Once a particular catalog or category is identified, she may edit it via a catalog/category edit page **2450**. After editing, the alterations are saved **2455** returning her to the catalog or category selection page **2440**.

### Reports

A merchant representative may request on-demand reports. Such reports include an account statement that details all payments to the merchant, and statistics about catalog visits and sales. Statistics can be correlated to hosts, links, products and time periods.

As illustrated in FIG. 25, a merchant representative begins at the Merchant Manager page **2300**. She selects the view reports option **2505** to view the report menu page **2510**. From the reports menu page **2510**, she may enter criteria **2514**, **2518** leading respectively to a revenue summary page **2520** or a monthly statement page **2530**. From the monthly statement page **2530**, she may change criteria **2535** to view a revised monthly statement **2530** or return to the report menu **2510**. From the revenue summary page **2520**, she may select a specific item **2525** for receiving a detailed revenue page **2550**, alter the criteria **2527** to receive a revised revenue summary **2520**, or return to the reports menu page **2510**. From the detailed revenue page **2550**, she may return to the revenue summary page **2520**.

The following reports are available for the merchants to track their results:

- Revenue Summary by Month
  - This report provides sales and traffic information summarized by month. Data includes number of sessions, number of orders, gross and net sales, etc. Summarizes at the month level and allows 'Drill Down' to daily information.
- Revenue Summary by Host
  - This report provides sales and traffic information summarized by host. Data includes number of sessions, number of orders, gross and net sales, etc.
- Revenue Summary by Product
  - This report provides sales and traffic information summarized by Product. Data includes number of sessions, quantity in shopping cart and gross order amount.

All reports can be run as quick reports (this month, last month, this year, last year, all sales) or by inputting a specific date range.

### Order Tracking

A merchant representative can access a web interface that allows her to report the status of orders. This includes: reporting when the order was shipped, along with tracking information, and the status of all returned items.

The order tracking sub-module allows the merchant to manage all areas of an order. An order can have the following status:

- new—the order has been received and credit card information validated



## US 7,818,399 B1

## 9

pending—the merchant has acknowledged the order, it is waiting to be shipped

shipped—the merchant has shipped the order

An order can be shipped in multiple shipments. The merchant is credited for sales on shipped items.

The customer may also return part of an order or the entire order. The customer will obtain an RMA number (see the Shopping sub-module). All the merchant needs to do is acknowledge they have received the product back from the customer.

## Review Hosts

The Merchant Manager also allows the merchant to review which hosts have built links to that merchant's products.

The merchant can also view the host web page containing such links.

A merchant representative will be able to review the list of hosts with which the merchant has a relationship. The merchant will have access to some basic information about the host, including at least one of the host's links, so that the host's look and feel can be evaluated.

In a preferred embodiment, a representative may review hosts through pages and procedures as depicted in FIG. 26. She begins at the Merchant Manager page **2300**. She selects the review hosts option to view the merchant-host relationship page **2600**. From this page, she may elect to view one of her products in the host's look and feel **2610** or view a list of links with the selected host that are directed to her commerce objects **2620**.

Automated interfaces can be introduced for merchants wishing to integrate their business systems with the functionality supported by the present inventions. Merchants can update their online catalogs, retrieve information on orders placed, and send order status updates back via automated interfaces. This integration is accomplished through the establishment and use of a standardized communication protocol.

In a preferred embodiment, merchants integrate by exchanging specially formatted XML documents over secure HTTP connections (i.e. HTTP over SSL). If the request is a query, the HTTP response will contain an XML document with the query results. Likewise, if the request is a command, the response will be an XML document containing the success or failure of the command.

Automated requests and responses are XML documents as described by the W3C's XML 1.0 specification, which may be found at <http://www.w3.org/TR/REC-xml> and which is expressly incorporated herein by reference in its entirety. The XML specification only describes the syntax of an XML document, it does not place any restrictions on the content of the document. The content of requests and responses is described using a formal notation known as DCD (for Document Content Description). DCD's are described in a note that was submitted to the W3C by Microsoft and IBM. The DCD note can be viewed online at: <http://www.w3.org/TR/NOTE-dcd> and which is expressly incorporated herein by reference in its entirety. A specific DCD describes the format of a request or response in the same way that the SMTP specification describes the format of an email. Typical DCDs for Automated Interfaces may be accessed at the following URLs: <http://automation.nexchange.net/dcd/ManageInventory.01.02.dcd.xml> and <http://automation.nexchange.net/dcd/Manage-Catalog.01.02.dcd.xml>, both documents are expressly incorporated herein by reference in their entirety.

## 10

All interfaces have the same basic structure. The table below illustrates the basic structure of Automated Interface requests and responses.

```
<ManageOrders
specification='http://www.nexchange.net/automated/xml/ManageOrders.
01.01.dcd'>
```

HEADER

```
<RequestHeader
Response
  <Authentication
    username='xxx'
    password='xxx'
    scope='xxx'
  />
  <Instructions OnFail='HALT'/>
  <Receipt Processor='xxx' Date='xxx' Number='xxx'/>
  <ResponseSummary Status='SUCCESS'>
    Error Message Here
  </ResponseSummary>
</RequestHeader>
```

## BODY

```
<RequestBody>
Query
  <Command status='SUCCESS'>
    <QueryNewOrders/>
  </Command>
query
  <QueryNewOrdersResponse>
    Query Results Here
  </QueryNewOrdersResponse>
</RequestBody>
Operation
  <Command status='SUCCESS'>
    <AcknowledgeOrder order_id='xxx'>
      item_price_total='xxx' />
    </AcknowledgeOrder>
  </Command>
</Operation>
</ManageOrders>
```

All responses contain the original request with status information and query results appended. The table above shows a response to a Manage Orders request. The response is divided into a header and a body section (“RequestHeader” & “RequestBody” respectively).

The `RequestHeader` element contains authentication information and global instructions. When the request is returned, the request header will also contain a receipt and a response summary. The authentication element carries the information needed to identify and authenticate the requesting party. The global instruction element contains instruction on how the request is to be processed if an error is received. The remainder of the commands in the request can be processed or the request can be discontinued. In a response, the receipt element is added to the request header. Information in the receipt can be used to recover the response. The response summary element contains a status code, which will be set to "SUCCESS" if all commands were completed successfully.

The `RequestBody` element contains one or more command elements. The exact content of a command element depends on the interface being used. When a command is submitted, its status attribute will always be "REQUESTED". When the command has been processed, the response will echo back the command with the status changed to "SUCCESS", "FAILURE" or "SKIP". In the case of a query command, the response will contain a query response in addition to the status.

If the request conforms to the DCD, the response will contain the original request with the status and query

## US 7,818,399 B1

11

results embedded. The command status codes must be inspected to determine what has been done.

If the request did not conform to the specification, two possible error types can occur:

XML Parsing Error  
DCD Validating Error

Errors are returned as NexError node. If a NexError is returned, the XML document has not been processed. The returned XML should always be examined for a NexError.

If the request document is not valid XML, an XML Parsing Error will be returned. A NexError node will be added around the entire document. It will look similar to the following:

```
<NexError Msg="XML Parsing Error" . . . >
  <XMLParseError errorcode=" " reason=" " line=" " line-
pos=" " >
```

```
    offending section of document
  </XMLParseError>
```

```
</NexError>
```

The errorcode, reason, line and linepos will contain information explaining what the error is and the location in the file.

If the request document is valid XML but does not match the published Interface DCD, a DCD Validating Error will be returned. A NexError node will be added around the entire document. A DCDError node will be embedded in the document at the location of the error. It will look similar to the following:

```
<NexError Msg="XML Validating Error" . . . >
  <XMLValidateError msg="Find the DCDError Node in
the document for detailed error information."/>
```

```
    . . . Valid Portion of document . . .
  <DCDError message=" " >
```

```
    offending section of document
  </DCDError>
```

```
    . . . Valid Portion of document . . .
  </XMLValidateError>
```

```
</NexError>
```

The following is an example request attempt to add one new product and to update the price of an existing product.

```
<ManageInventory
specification='http://automation.nexexchange.net/dcd/Manage
Inventory.01.02.dcd.xml'>
  <RequestHeader>
    <Authentication username='xxxxx'
password='xxxx' scope='MNNN'/>
    <Instructions onfail='CONTINUE'/>
  </RequestHeader>
  <RequestBody>
    <Command status='REQUESTED'>
      <AddProductDef updateifexists='1'>
        <ProductDef
          id='saw'
          skumask='saw'
          name='saw'
          description='A Circular Saw From Festo'
          shortdescription='Festo Circular Saw'
          info='no comment'
          image='http://216.0.58.242/rmttools/fw132saw.jpg'
          largeimage='http://216.0.58.242/rmttools/fw132saw.jpg'
          usualprice='145.00'
          saleprice='135.00'
          compareprice='215.00'
          salelabel='HOT PRICE'
```

12

-continued

```
instock='1'
commplan='default'
>
  <AttributeDefList/>
  <KeywordList/>
</ProductDef>
</AddProductDef>
</Command>
  <Command status='REQUESTED'>
    <UpdateProductDef
      id='saw'
      image='http://216.0.58.242/rmttools/fw132saw.jpg'
    />
  </Command>
</RequestBody>
</ManageInventory>
```

## 2. Host Manager

The Host Manager is the "Control Center" for Hosts. Here, a Host can track sales, design their store front, generate links to merchant products, get traffic/order reports, update account information, etc

For a host to gain access to the host manager system, the host must be registered. FIG. 4 depicts a flow chart for a typical registration process. A host representative may initiate contact 410 with the system via a web interface. The signup process must collect basic host information 420, including the information necessary to pay the host a commission for purchases through his site, which is saved by the system 430. Optionally, a click agreement containing terms of use 440 may be presented requiring agreement 444 to proceed. If at some point the representative elects to cancel 425, 458 or reject the use agreement 448, he or she is returned to her point of entry 410. The system may then request the representative to select a user identification and a password 450. If the selected user identification is already in use 454, the representative may be prompted to select a user identification 450. The information associated with the host is stored 460, and the representative may proceed to the host manager system page 470.

When a host logs in, they are taken directly to the Host Manager, as seen in FIG. 10, and assigned a Host Session ID (Host SID). All pages within the host system must request the Host Sid and call the ValidateHostSessionID function. If the session does not validate, the user is taken back to the Login screen.

This module contains the following submodules:

### Account Information

This sub-module allows a host to maintain the following types of information:

Administrative Contact—name, address, phone

Payee Contact—name, address, phone, SSN

Site Information—site name, URL, description

Site Demographics—# of visitors, type of visitors, comments

A host representative will be able to maintain basic host information, including the information needed to pay the host, and the host's password. FIG. 5 depicts a flow chart of the pages and actions in a typical maintenance process. The representative has previously logged into the system to reach the host manager system page 470. From the host manager system, the representative selects to update her account 510 leading to a host information maintenance page 520. The representative can modify host information and, then choose to save or

## US 7,818,399 B1

## 13

cancel the modification **530**. In either case, the representative is returned to the host manger system page **470**.

## Store Front Design

The store front design is where the host's look and feel is captured. The look and feel is captured by selecting an example page the host, retrieving the sample page from the host, identifying the look and feel elements from the sample page and saving the identified look and feel elements. "Look and feel elements" include logos, colors, page layout, navigation systems, frames, 'mouse-over' effects, or other elements that are consistent through some or all of a Host's website. A typical system for accomplishing this task would include a data store for storing look and feel descriptions, a communication channel to the host whose look and feel is to be captured and a processor for executing the capture.

When a customer clicks on a host buying opportunity (link), the next page loaded will be a shopping page. However, this shopping page should retain the host's look and feel. This is accomplished by capturing the HTML text and images that comprise their look and feel and embed within it the shopping HTML content. Any relative URLs in the host look and feel may be changed to absolute URLs back to the host system.

In a preferred embodiment, there are five steps to a process capturing the host's look and feel, converting relative URLs to absolute URLs and validation of links.

A host representative will be able to capture host look and feel information and to update host look and feel information through recapture. FIG. 6 depicts a flow chart of the pages and actions in a typical look and feel capture process. The representative has previously logged into the system to reach the host manager system page **470**. From this page, the representative selects to initiate host look and feel capture through a design storefront wizard **605**. An introduction page is presented explaining the process **610** from which the representative proceeds in the following manner:

Base URL **615**—the URL used to convert relative links to absolute links, as seen in FIG. 11

header **620**—the HTML to be rendered BEFORE the shopping html. Selection may be made by code, as seen in FIG. 12, by graphical point and click selection or other suitable selection method.

footer **625**—the HTML to be rendered AFTER the shopping html. Selection may be made by code, as seen in FIG. 13, by graphical point and click selection or other suitable selection method.

preview **630**—shows what the shopping page will look like (nothing has been captured yet). From this preview page **630**, as seen in FIG. 14, the representative may elect to return to earlier stage to perform a change **635**, **640** or **645** of base URL, header or footer respectively. The user may also have access to a preview **650** with example content included to demonstrate a typical page with both content and look and feel **680**, as seen in FIG. 15. From the generic preview page **630**, the representative may choose to continue **655** with finalizing the look and feel **660**.

final check **660**—finalize the captured look and feel, as seen in FIG. 16, this page may allow validation of links and images and offer to save the captured look and feel. Once validation, if any has been performed, and the look and feel has been saved, the process completes **675**.

## 14

validation **665**—validate the link and image URLs in the header and footer HTML. FIG. 17 displays the screen capture of page that could be used to display validation progress.

save **670**—Actually captures, processes and saves the storefront information. A completion page such as seen in FIG. 18 may be displayed.

For security reasons, javascript is accepted but applets are stripped out in the preferred embodiment.

## Link Generator

The Link Generator allows host to create and maintain the shopping opportunities that they can then place on their site. Each Link is assigned a unique Link ID. The Link ID identifies who the host is, who the merchant is, and what commerce object (catalog, category, product or dynamic selection) is linked to.

The first time a host builds a Link to a merchant's product, category or catalog, an approval of that host for that merchant may be made. Until the host is approved, they cannot see the Link ID that has been assigned to the newly created Link.

The code the host embeds on their web site is as follows:

```
<!--BEGIN NEXCHANGE LINK-->
```

```
<!--For more information go to http://www.nexchange.com-->
```

```
<!--The following 2 lines MUST NOT BE CHANGED to ensure proper crediting-->
```

```
<IMG BORDER='0' SRC='http://www.nexchange.net/img.asp?LinkID=xxxx'>
```

```
<a href='http://www.nexchange.net/route.asp?LinkID=xxxx'>
```

```
<!--Substitute your own text or image below-->
```

```
**YOUR TEXT OR IMAGE HERE**</a>
```

```
<!--END NEXCHANGE LINK-->
```

There are several points to note here:

The image src (img.asp) is actually an ASP program that returns a single transparent pixel. This is used to track impressions (how many times the link was displayed on the host site).

The route.asp page is a page that routes the customer to the shopping page. As additional servers are added, this will become very important for load balancing.

The 'xxxx' for the LinkID='xxxx' is the Link ID assigned to the Link in the Link Generator.

A host representative will be able to generate links to commerce objects. FIG. 7 depicts a flow chart of the pages and actions in a typical link generation process. The representative has previously logged into the system to reach the host manager system page **470**. From this page, the representative selects to generate links **705**, which transfers her to a page containing a list of all previously generated links for that host **710**.

From this page, the representative may choose among several options: view an existing link **722**, remove an existing link **735**, edit an existing link **728** or add a new link to either a merchant with whom a link already exists **720** or a merchant without an existing link **715**. In viewing an existing link **722**, the page containing the link may optionally displayed in a separate window **725**; as a consequence, the representative could continue to interact with the list of available links page **710** in the primary window. The representative could select a link for removal **735** and, upon removal, return to the list of links

If either determination is negative, the host page including the link is retrieved **850**. The page content is analyzed, and based upon the analysis, content for the link destination is selected **860**. The selected content is cached for potential future use **870**. Finally, a page is constructed with the dynamically selected content along with the look and feel associated with the host from which the link originated **840**. The analysis in **860** may take a variety of forms including, in a preferred embodiment, identification of marked keywords. In another embodiment, keywords may be dynamically determined using word count statistics.

A variety of generic information may be available from any shopping page within the system. Such information could include information about the e-commerce outsource provider 2222, information about the merchant offering the cur-



### Application Server Tier

The business functionality is provided via “application servers”. An application server will consist of one or more of the business modules, wrapped with an appropriate middleware adapter. This arrangement allows delivery of services via many different mechanisms. For example, if it becomes desirable to serve some functions to a Java client, a Java Remote Method Invocation (RMI) version of an application server could be built. The new server could be developed rapidly because only an RMI “wrapper” would need to be developed, while the application logic would be reused. In a preferred embodiment, this layer consists of a set of core C++ software modules that encapsulate business functions.

The Application Server tier may run on one or more application server computers. The application servers are stateless. This means that, for two application servers serving the same functionality, “one is as good as another”. In the event of failure, a client’s requests may be handled by a different server than before the failure. Since it does not matter which server services a request, routing is greatly simplified. The stateless server approach also provides excellent fault tolerance since all application servers can back each other up. Use of a combination of “sticky routing” and caching to significantly ameliorate any detrimental performance implications of the stateless approach, while preserving most of the benefit. Once a client begins using a particular service, the system will show a preference for routing future requests from that client to the same server. The servers maintain a cache recently used data and will only access the database if the desired item cannot be used in cache. Since the routing is sticky, the client’s data will often be in cache, and in many cases, no database access will be required. Should the client be routed to a new server, the session data can be retrieved from the database as occurs in the “vanilla” stateless model. In a preferred embodiment, the functionality of this layer utilizes one or more low cost server systems 125a-125d running a suitable operating system such as Microsoft Windows NT. This tier is also composed of several software layers as illustrated in FIG. 3:

Remote Procedure Call Server **310**. This software provides 40  
connectivity to the Web Server layer and is not applica-  
tion dependent. In a preferred embodiment, this soft-  
ware layer is the Objectstore Component Server.

**Application Logic 320.** This software encapsulates the business functionality. The design of this software layer and the various application servers is more fully described below.

**Virtual Database 330.** The virtual database layer allows the application data to be distributed across multiple Database servers while insulating the application layer from the physical storage configuration. The virtual database contains a table that maps object types to physical databases. All database objects or records of a given type are distributed across the permissible databases. Databases can be added while the system is live to permit expansion onto new servers. Overburdened databases can be closed to prevent assignment of new data to them. Databases can be moved to different physical servers. All stored objects are referenced by a handle which is unaffected by the physical location of the referenced data. The virtual database layer also permits a collection of objects distributed across multiple servers to be indexed and searched.

DBMS Client **340**. This software provides access to data stored in the databases. In a preferred embodiment, the DBMS client is Object Design's Objectstore client. All Objectstore clients contain a cache of recently used data-

base pages. An optimistic locking scheme is used to ensure cache consistency. The caching scheme is very effective in the present invention because it is optimized for many readers and few writers.

In a preferred embodiment, the application server layer includes the following eight application servers:

1. Cashier—Collects Checkout Information: Billing Info, Shipping Preferences, Etc.

The Cashier server is analogous to a cashier in a “bricks and mortar” store. The cashier’s responsibilities are listed below:

### Collecting Information Necessary To Complete a Sale.

This information will include billing information, shipping address(s) and preferred shipping methods. In some cases, the information to be collected may depend on the contents of the order. The cashier will also access the appropriate merchant policy information to assist in determining what data should be collected.

Providing an Itemized Account of the Total. Upon receiving the necessary data, the cashier will compute the applicable taxes, shipping charges, etc., and provide an itemized account of the order total.

**Execute the Sale.** Upon request, the cashier will execute the sale. A copy of the relevant information will be sent to the credit processor. When the credit processor approves the orders, the cashier will break the customer's order into individual merchant orders and forward them to the Merchants' Order Tracking server. The cashier will also post a record to the Ledger at this time.

2. Catalog—Houses Product Hierarchies. Conducts Product Searches.

The catalog is an arrangement of product information. The catalog server supports a hierarchical browsing mode and various searching functions. Its responsibilities are listed below:

Retrieve a catalog upon request. The catalog will include all content for a shopping experience. For products, the information will include the product description, price and options.

Retrieve a list of products matching a query. This will initially support simple keyword searching, but may be expanded to more sophisticated searching techniques.

3. Credit Processor—Conducts Card Validation and Fraud Screening.

The credit processor takes a candidate order and performs card authorization and fraud screening. The card processor cooperates with the order tracker to keep the status of the order updated.

**Perform Credit Card Authorization.** Contact the card processing vendor and authorize the card. Retrieve the Address Verification System (AVS) code for to use in fraud screening.

**Perform Fraud Screening.** The system performs a fraud screening analysis based on the following factors: dollar amount of the order, AVS code, whether the billing and shipping address match, and whether the email address given is a free e-mail account.

#### 4. Notifier—Sends Messages.

The Notifier keeps track of who wants to be notified of what and how they should be notified. The notifier receives notification of various system events and takes the appropriate course of action. The appropriate course of action will depend upon the event and the party to be notified. For example, a merchant that does a high volume of sales and is

## 21

already integrated with the system may not wish to receive email notification of every order.

5. Ledger—Records and Reports on all Financial Events.

The Ledger is a record of all financial events. The ledger contains interfaces for posting events and interfaces querying and inspecting the ledger. Responsibilities include:

Post an Order Event. The order event happens when the shopper confirms an order.

Post a Sale Event. The sale event occurs when a merchant marks the last item in an order shipped.

Post an Return Merchandise Authorization (RMA) Open  
Event/Post an RMA Completed Event/Post an RMA  
Canceled Event

Post a Journal Entry. This interface will be used to record non-standard events. The posted ledger entries must collectively have an equal number of debits and credits.

## 6. Order Tracker—Records and Reports on Order Status.

This is the repository of order information. The order tracker includes a cashier's interface for creating a new order, a Merchant's interface for keeping the order status updated, and a Customer Service interface for checking on the status of the order and making relevant annotations.

**Query Order Status.** This method is used by purchaser to check on the status of a pending order.

**Ship Order.** This method is used by a merchant to document the parceling of an order into shipments.

7. Shopping Cart—Holds Products that have been Selected for Purchase.

The shopping cart is simply a collection of Inventory Reservation documents that represent the items that have been selected by the shopper. The shopping cart includes methods for adding and removing Inventory Reservations and for inspecting the contents of the cart.

#### 8. Warehouse—Inventory Availability Information. Product Configuration Interfaces.

The Warehouse represents a collection of physical items that are in stock. Responsibilities of the Warehouse are listed below:

Provide Information on Stock Levels of a Particular Item/Order Items Having Low Inventory Levels. This is an advanced capability by which inventory may be dynamically reserved from a merchant, based on the current inventory levels.

**Provide Information on Product Configuration Options.**  
The warehouse will provide a blank Inventory Reservation document that will specify all of the product's configuration options.

**Issue Reservations Against Inventory.** A shopper will fill out an Inventory Reservation (which includes all configuration options) and submit it to the warehouse. If the item, as configured, is available, the reservation will be issued. This will serve to reserve the inventory for a fixed period of time.

### Database Server Tier

Finally, the Database server tier is composed of a single software layer. This layer is responsible for low level manipulation of the data in the one or more databases. This tier may consist of multiple database servers. Using multiple servers is a major advantage for obvious reasons. The system's database chores can be distributed to many different servers. In a preferred embodiment, the database server is Object Design's Objectstore server. Objectstore supports a "warm failover" mode which allows a backup server to take over automatically if the primary should fail. An Microsoft SQL server is also

## 22

used in the preferred embodiment to maintain financial records although properly configured another DBMS such as Objectstore or a commercially available accounting package could provide capability suitable for financial record keeping.

The foregoing discussion describes the primary actors interacting with a system according to the present invention. After identifying these actors, typical transaction flows through the system are presented.

There are three main parties in the outsourced e-commerce relationship, excluding the end consumer. These parties include Merchants, Hosts, and the e-commerce outsource provider. This folds into two parties where one party plays the dual role of Host and Merchant.

## Merchants

Merchants are the producers, distributors, or resellers of the goods to be sold through the outsource provider. The primary responsibilities of a Merchant are to:

Maintain an up-to-date catalog within the system including all products that are available for sale in storefronts served by the outsource provider

Create approval standards for passively recruited Host applicants based upon website profiles and target audience characteristics

Fulfill all orders received from the e-commerce outsource provider

Provide assistance to outsource provider regarding promotional strategies. This can be accomplished by supplying marketing literature and materials, as well as any sales incentives. The Merchant owns the marketing literature and materials, and may access and modify these items as necessary.

Provide service and support to customers generated via the outsource e-commerce provider

Maintain internal records of orders filled through the out-source provider and process payments from the out-source provider for these orders

Inform the e-commerce outsource provider of any backlogs, fulfillment delays, product changes, or other significant situations

## Hosts

A Host is the operator of a website that engages in Internet commerce by incorporating one or more link to the e-commerce outsource provider into its web content. The responsibilities of a Host are to:

Use the outsource provider Host Manager service bureau to select the Merchants and products that will be offered from the Host's website

Promote transactions through the e-commerce outsource provider hosted by the website

Regularly review the Merchant offerings for which they have been approved in order to take advantage of new products and to review sales and promotional strategies made available to them by the Merchant

## E-Commerce Outsource Provider

The role of outsource provider is to:

Develop and maintain the outsource provider service bureau—the systems and software which provide the platform for e-commerce support services

Identify and recruit target Host websites and monitor/manage these relationships

US 7,818,399 B1

## 23

Create customer-transparent Host processing “pages” on a secure server to receive order and payment information

Create, maintain, and update the “look & feel capture” process through which consumers are able to shop in a Merchant-controlled storefront within the design and navigational context of the Host website, preserving the ownership of the visit experience by the Host

Authorize credit card transactions (in most cases)

Process credit card payments for orders received (in most cases)

Pay periodic commissions to Hosts for orders shipped during a prior period

### Transmit orders to Merchants

Pay Merchants for orders filled

Manage the commission structure for Merchant-Host relationships to maximize sales and revenues

## Screen and approve Host applications

Support and monitor the merchandise return/refund process and other customer service functions

This following describes the order entry and settlement process from the initial promotion on a Host website all the way through to fulfillment, payment processing, commission payment, and Merchant payment.

## Order Placement, Fulfillment, and Settlement Overview

The overall transaction process is very straightforward. The following is a list of the steps involved in receiving and processing an order request.

- a) A customer visits a Host website and, through contextually relevant content, becomes interested in a product offered.
- b) The customer selects the item(s) that she wishes to purchase by clicking a product image, banner-style link, or text link, or other offer format taking her to a dynamically generated web pages which retain the look and feel of the referring Host and are served by the e-commerce outsource provider.
- c) The customer browses through the products offered, indicating which items are to be purchased and in what quantities via forms on-screen. Selected items appear within the shopping cart at the top of the shopping interface. The user remains on the product screen without ever being involuntarily removed to a detailed shopping cart-only screen, representing a significant enhancement over most shopping cart technology in place today. When all desired products are selected, the customer initiates the checkout procedure, never leaving the Host website.
- d) The secure checkout interface appears, still consistent in look and feel with the Host's referring website. The customer completes the order form, provides all billing and shipping information required, confirms the items selected for purchase, and remits credit card information for payment processing.
- e) Assuming the payment method is authorized, the customer is returned to another section of the Host's website, possibly just returning to the page in which the offer was placed, as determined by the Host.
- f) The e-commerce outsource provider passes the order to the Merchant in real time. The credit card may be charged at this point or upon confirmation of shipment.
- g) The Merchant receives and logs the order.
- h) The Merchant then assembles and ships the order to the customer, keeping the outsource provider apprised of the order status.
- i) Periodically, the outsource provider will remit payment to the Merchant for that period's filled orders.
- j) Periodically, the outsource provider will remit payment to Hosts for all commissions earned in the prior period.

## 24

## Host Process Flow

The process flow for a prospect to become a Host and be fully able to endorse/promote/offer Merchant products is as follows:

- 5 a) Hosts are recruited from three sources: direct recruiting, in which the Host prospect is identified by and approached by an e-commerce outsource provider representative; passive recruiting, in which the Host has been referred to the outsource provider by other Hosts, relevant meta-sites (sites that contain lists of and links to other sites/services), or other sources; and Host Agent recruits, in which a specialized third party Agent identifies and approaches Host prospects. In many cases, the use of online signup forms and brochures may be a factor in recruitment.
- 10 b) Prospect completes the Host application form (except where preapproved), providing information about the type of website(s) operated by the Host, some traffic statistics about these websites and general visitor demographics, and complete contact information. The prospect also selects an outsource provider system user ID and password which will later be used to access the system, retrieve important Hosting information and programming, and modify the custom materials in the outsource provider transaction processing engine.
- 15 c) The application is received and the information therein is reviewed, and the application is either approved or rejected (unless this is a preapproved Host). If approved, the Host's ID and password are activated, and an automated message is sent to the new Host informing them of their approval.
- 20 This message will also contain instructions for accessing the e-commerce outsource provider system, setting up their links to the outsource provider, and inserting outsource provider data into their website(s). Preapproved Hosts will be immediately able to access this system upon submission of their application.
- 25 d) Host accesses e-commerce outsource provider system to begin the step-by-step setup process. The Host first identifies a page from their own website which will provide the look and feel to be replicated. Following this, the Host configures product selections for each of its approved Merchants and downloads product images, text, and CGI/HTML code for their own website. Host then completes changes to website and activates new content. Hosts are free to promote their use of the outsource provider as they feel is suitable to the product at any time and with any frequency, subject to reasonable limitations.
- 30 e) Hosts will be able to access real-time reports about transaction volume including number of users, average purchase amount per user, number of purchases on specified days or within specified date ranges. Hosts can create customized reports to determine conversion rates, top selling products, commissions earned, paid, and due, and other pertinent information. This information can be leveraged by the e-commerce outsource provider and the Host to improve the efficacy of targeted marketing efforts on the Host's website.
- 35

### Internal System Transaction Flow

The e-commerce outsource provider system acts as a clearinghouse for all orders. The system maintains a real-time interface with a credit card authorization and processing service and a robust database engine which is able to process transactions, record all transaction activities, generate reports used for commission payments and auditing of Merchant invoices, and track order status. The transaction flow for the outsource provider service bureau is directly related to the structure of the underlying database.



26

certain information regularly and accurately. Merchants will be monitored to ensure timely fulfillment in order to provide the best quality customer service.

- The steps of the Merchants transaction flow after they have been established within the system are as follows:

a) The designated recipient of orders within the Merchant organization will check for new orders at least on a daily basis, if not more frequently. Orders are received by the Merchant via e-mail or other electronic notification, including automated direct input to legacy order management systems owned or operated by the Merchant. These orders include all pertinent customer data required for fulfillment of each order. Merchants may also view all orders online, sorted by date, status (new/viewed), or other criteria, and download orders in bulk form directly from the outsource provider.

b) After receiving the order, the Merchant will ship the order to the Customer within a reasonable time period for the type of merchandise ordered. Merchant will have the ability to modify the shipping status of the orders within the system. Merchants are obligated to provide timely shipping of their products. If any item ordered is out of stock or discontinued, the Merchant must update their catalog on the e-commerce outsource provider immediately and notify any affected customers immediately via e-mail or regular mail. Orders should be processed according to whatever internal process flow has been established by the Merchant.

c) Upon receipt of payment for the prior month's orders, the Merchant is responsible for reconciling the amount remitted with their own fulfillment records. Any disputes should be addressed by accessing the Merchant interface and querying/updating records.

The embodiments described above are given as illustrative examples only. It will be readily appreciated that many deviations may be made from the specific embodiment disclosed in this specification without departing from the invention. Accordingly, the scope of the invention is to be determined by the claims below rather than being limited to the specifically described embodiment above.

The invention claimed is:

1. A method of an outsource provider serving web pages offering commercial opportunities, the method comprising:

- (a) automatically at a server of the outsource provider, in response to activation, by a web browser of a computer user, of a link displayed by one of a plurality of first web pages, recognizing as the source page the one of the first web pages on which the link has been activated;

(i) wherein each of the first web pages belongs to one of a plurality of web page owners;

- (ii) wherein each of the first web pages displays at least one active link associated with a commerce object associated with a buying opportunity of a selected one of a plurality of merchants; and

(iii) wherein the selected merchant, the outsource provider, and the owner of the first web page are each third parties with respect to one other;

(b) automatically retrieving from a storage coupled to the server pre-stored data associated with the source page; and then

- c) automatically with the server computer-generating and transmitting to the web browser a second web page that includes:
- (i) information associated with the commerce object associated with the link that has been activated, and

27

- (ii) a plurality of visually perceptible elements derived from the retrieved pre-stored data and visually corresponding to the source page.

2. The method of claim 1 wherein the commerce object associated with the link that has been activated is a dynamic selection indicator.

3. The method of claim 1 wherein at least one of the plurality of visually perceptible elements includes a set of navigational links on the source page.

4. The method of claim 1 wherein at least one of the 10 plurality of visually perceptible elements includes the appearance of the top and left side of the source page.

5. The method of claim 1 wherein at least one of the plurality of visually perceptible elements includes the appearance of the header and footer of the source page.

6. The method of claim 1 wherein at least one of the plurality of visually perceptible elements includes a logo associated with the owner of the source page.

7. The method of claim 1 wherein the commerce object associated with the link that has been activated comprises information defining an electronic catalog having a multitude of merchant offerings, and wherein the second web page contains one or more selectable navigation links connecting a hierarchical set of additional second web pages, each pertaining to a subset of the offerings in the catalog.

8. The method of claim 1 wherein the second web page is generated dynamically.

9. The method of claim 1 wherein the owner of the source page is party to a contract providing for receipt of a commission as a result of a transaction involving the commerce object displayed on the source page.

10. The method of claim 9 further comprising computer-facilitating automatic payment to the owner of the source page, once the transaction is completed.

11. The method of claim 1, wherein the second web page 35 appears to the computer user to be generated by a server associated with the source page.

12. The method of claim 1, wherein the link activated by the web browser is stored in a database associated with the source page.

13. The method of claim 1, wherein the second web page contains a further link associated with the information associated with the commerce object associated with the link that has been activated, which link, when activated by the web browser, places data representing the commerce object into a virtual shopping cart.

14. The method of claim 13, wherein the second web page contains a checkout link which, when activated by the web browser, facilitates completion of a transaction associated with the commerce object in the shopping cart.

15. The method of claim 14, further comprising after the transaction is completed, computer-facilitating payment from the computer user to the merchant associated with the activated link.

16. The method of claim 14, further comprising after the transaction is completed, computer-facilitating payment of a commission to the owner of the source page.

17. The method of claim 13, further comprising displaying the second web page again, after the commerce object is placed into the shopping cart.

18. The method of claim 1, wherein the visually perceptible elements displayed on the second web page are retrieved from a database storing data associated with visually perceptible elements for each of the first web pages.

19. A system useful in an outsource provider serving web pages offering commercial opportunities, the system comprising:

28

(a) a computer store containing data, for each of a plurality of first web pages, defining a plurality of visually perceptible elements, which visually perceptible elements correspond to the plurality of first web pages;

(i) wherein each of the first web pages belongs to one of a plurality of web page owners;

(ii) wherein each of the first web pages displays at least one active link associated with a commerce object associated with a buying opportunity of a selected one of a plurality of merchants; and

(iii) wherein the selected merchant, the outsource provider, and the owner of the first web page displaying the associated link are each third parties with respect to one other;

(b) a computer server at the outsource provider, which computer server is coupled to the computer store and programmed to:

(i) receive from the web browser of a computer user a signal indicating activation of one of the links displayed by one of the first web pages;

(ii) automatically identify as the source page the one of the first web pages on which the link has been activated;

(iii) in response to identification of the source page, automatically retrieve the stored data corresponding to the source page; and

(iv) using the data retrieved, automatically generate and transmit to the web browser a second web page that displays: (A) information associated with the commerce object associated with the link that has been activated, and (B) the plurality of visually perceptible elements visually corresponding to the source page.

20. A computer-readable memory adapted for use by an outsource provider in serving web pages offering commercial opportunities, the computer-readable memory used to direct a computer of the outsource provider to perform the steps of:

(a) in response to activation, by a web browser of a computer user, of a link displayed by one of a plurality of first web pages, automatically recognizing as the source page the one of the first web pages on which the link has been activated;

(i) wherein each of the first web pages belongs to one of a plurality of web page owners;

(ii) wherein each of the first web pages displays at least one active link associated with a commerce object associated with a buying opportunity of a selected one of a plurality of merchants; and

(iii) wherein the selected merchant, the outsource provider, and the owner of the first web page are each third parties with respect to one another;

(b) automatically retrieving from a storage coupled to the computer of the outsource provider pre-stored data associated with the source page; and then

(c) automatically computer-generating and transmitting to the web browser a second web page that includes:

(i) information associated with the commerce object associated with the link that has been activated, and

(ii) a plurality of visually perceptible elements derived from the retrieved pre-stored data and visually corresponding to the source page.

21. The computer-readable memory of claim 20 wherein the commerce object associated with the link that has been activated is a dynamic selection indicator.

22. The computer-readable memory of claim 20 wherein the commerce object associated with the link that has been activated comprises information defining an electronic catalog having a multitude of merchant offerings, and wherein the

US 7,818,399 B1

29

second web page contains one or more selectable navigation links connecting a hierarchical set of additional second web pages, each pertaining to a subset of the offerings in the catalog.

**23.** The computer-readable memory of claim **20** wherein the computer-readable memory is used to direct the computer of the outsource provider to perform the further step of computer-facilitating automatic payment to the owner of the source page, once the transaction is completed.

24. The computer-readable memory of claim 20, (i) wherein the second web page contains a further link associated with the information associated with the commerce object, which, when activated by the web browser, places data representing the commerce object into a virtual shopping cart, and a checkout link which, when activated by the web browser, facilitates completion of a transaction associated with the commerce object in the shopping cart; and (ii) wherein the computer-readable memory is used to direct the computer of the outsource provider to perform the further steps of, after the transaction is completed, computer-facilitating payment from the computer user to the merchant associated with the activated link and computer-facilitating payment of a commission to the owner of the source page.

25. The computer-readable memory of claim 20, wherein the visually perceptible elements displayed on the second web page are retrieved from a database storing data associated with visually perceptible elements for each of the first web pages.

30

**26.** A computerized system for an outsource provider serving web pages offering commercial opportunities, the system comprising:

(a) means, at a server of the outsource provider, in response to activation, by a web browser of a computer user, of a link displayed by one of a plurality of first web pages, for automatically recognizing as the source page the one of the first web pages on which the link has been activated;

(i) wherein each of the first web pages belongs to one of a plurality of web page owners;

(ii) wherein each of the first web pages displays at least one active link associated with a commerce object associated with a buying opportunity of a selected one of a plurality of merchants; and

(iii) wherein the selected merchant, the outsource provider, and the owner of the first web page are each third parties with respect to one another;

(c) means for automatically retrieving from a storage coupled to the server pre-stored data associated with the source page; and

(d) server means for then automatically computer-generating and transmitting to the web browser a second web page that includes:

(i) information associated with the commerce object associated with the link that has been activated, and

(ii) a plurality of visually perceptible elements derived from the retrieved pre-stored data and visually corresponding to the source page.

\* \* \* \* \*

ASSERTED CLAIMS  
U.S. PATENT NO. 6,993,572

13. An e-commerce outsourcing system comprising:
  - (a) a data store including a look and feel description associated with a host web page having a link correlated with a commerce object; and
  - (b) a computer processor coupled to the data store and in communication through the Internet with the host web page and programmed, upon receiving an indication that the link has been activated by a visitor computer in Internet communication with the host web page, to serve a composite web page to the visitor computer with a look and feel based on the look and feel description in the data store and with content based on the commerce object associated with the link.
  
17. An e-commerce outsourcing process comprising the steps of:
  - (a) storing a look and feel description associated with a first website in a data store associated with a second website;
  - (b) including within a web page of the first website, which web page has a look and feel substantially corresponding to the stored look and feel description, a link correlating the web page with a commerce object; and
  - (c) upon receiving an activation of the link from a visitor computer to which the web page has been served, serving to the visitor computer from the second website a composite web page having a look and feel a corresponding to the stored look and feel description of the first website and having content based on the commerce object associated with the link.
  
20. The process of claim 17 wherein the look and feel description comprises data defining a set of navigational links, used on at least some of the web pages of the first website, each of which links link to specific web pages of the first website.

## ASSERTED CLAIMS

U.S. PATENT NO. 7,818,399

1. A method of an outsource provider serving web pages offering commercial opportunities, the method comprising:
  - (a) automatically at a server of the outsource provider, in response to activation, by a web browser of a computer user, of a link displayed by one of a plurality of first web pages, recognizing as the source page the one of the first web pages on which the link has been activated; wherein each of the first web pages belongs to one of a plurality of web page owners;
    - i) wherein each of the first web pages belongs to one of a plurality of web page owners;
    - ii) wherein each of the first web pages displays at least one active link associated with a commerce object associated with a buying opportunity of a selected one of a plurality of merchants; and
    - iii) wherein the selected merchant, the outsource provider, and the owner of the first web page are each third parties with respect to one other;
  - (b) automatically retrieving from a storage coupled to the server pre-stored data associated with the source page; and then
  - (c) automatically with the server computer-generating and transmitting to the web browser a second web page that includes:
    - i) information associated with the commerce object associated with the link that has been activated, and
    - ii) a plurality of visually perceptible elements derived from the retrieved pre-stored data and visually corresponding to the source page.
3. The method of claim 1 wherein at least one of the plurality of visually perceptible elements includes a set of navigational links on the source page.

19. A system useful in an outsource provider servicing web pages offering commercial opportunities, the system comprising:
  - (a) a computer store containing data, for each of a plurality of first web pages, defining a plurality of visually perceptible elements, which visually perceptible elements correspond to the plurality of first web pages;
    - i) wherein each of the first web pages belongs to one of a plurality of web page owners;
    - ii) wherein each of the first web pages displays at least one active link associated with a commerce object associated with a buying opportunity of a selected one of a plurality of merchants; and
    - iii) wherein the selected merchant, the outsource provider, and the owner of the first web page displaying the associated link are each third parties with respect to one other;
  - (b) a computer server at the outsource provider, which computer server is coupled to the computer store and programmed to:
    - i) receive from the web browser of a computer user a signal indicating activation of one of the links displayed by one of the first web pages;
    - ii) automatically identify as the source page the other of the first web pages on which the link has been activated;
    - iii) in response to identification of the source page, automatically retrieve the stored data corresponding to the source page; and
    - iv) using the data retrieved, automatically generate and transmit to the web browser a second web page that displays: (A) information associated with the commerce object associated with the link that has been activated, and (B) the plurality of visually perceptible elements visually corresponding to the source page.

**CERTIFICATE OF SERVICE**

I hereby certify that on the 9th day of October, 2013, two copies of the foregoing **CORRECTED APPELLANTS NATIONAL LEISURE GROUP, INC. AND WORLD TRAVEL HOLDINGS, INC.'S APPEAL BRIEF** was served by mail on the first-named counsel below for each party, and by email on all counsel as follows :

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